



# Personalised Medicine in the EU R&I Framework

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European Commission  
DG Research and Innovation

Research and  
Innovation

# **Council Conclusions on Personalised Medicine (PM) for patients (2015/C 421/03)**

*"Personalised medicine refers to a medical model using characterisation of individuals' phenotypes and genotypes (e.g. molecular profiling, medical imaging, lifestyle data) for tailoring the right therapeutic strategy for the right person at the right time, and/or to determine the predisposition to disease and/or to deliver timely and targeted prevention"*

Definition developed by the Advisory group for the H2020 Health, demographic change and well-being challenge

Digital Single Market

LAW | 25 April 2018

# Communication on enabling the digital transformation of health and care in the Digital Single Market; empowering citizens and building a healthier society

- *Citizens' secure access to their health data, also across borders;*
- *Personalised medicine through shared European data infrastructure;*
- *Citizen empowerment with digital tools for user feedback and person-centred care.*

# EC Communication Health and Care in the Digital Single Market (April 2018)

## Personalised medicine:

- Coordination of stakeholders to share data and infrastructure;
- Development of technical specifications for secure access and cross-border exchange of health datasets;
- Pilot actions to demonstrate benefits.



# Actions to support inter-regional cooperation in the area of Health R&I

- Participation of regions in the IC Permed initiative
- Mapping of the Health R&I priorities in RIS3
- Thematic Partnerships, under the DG JRC Smart Specialisation Platform for Industrial Modernisation
- EU Regions Workshop for PM organised by DG RTD in May 2017

Coordination and Support projects under grant agreement preparation, for regions with interest in the area of personalised medicine.

- R&I Days session "Personalised Medicine and the Regional Dynamics"



# International Consortium for Personalised Medicine



WHAT

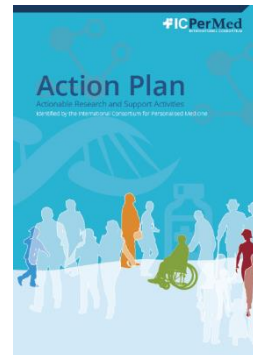
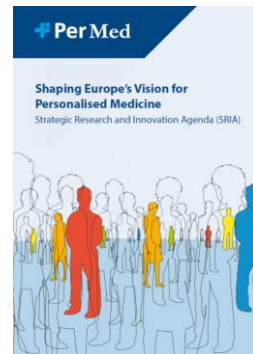
- Collaboration of research funders and policy makers from EU Member States and beyond

WHY

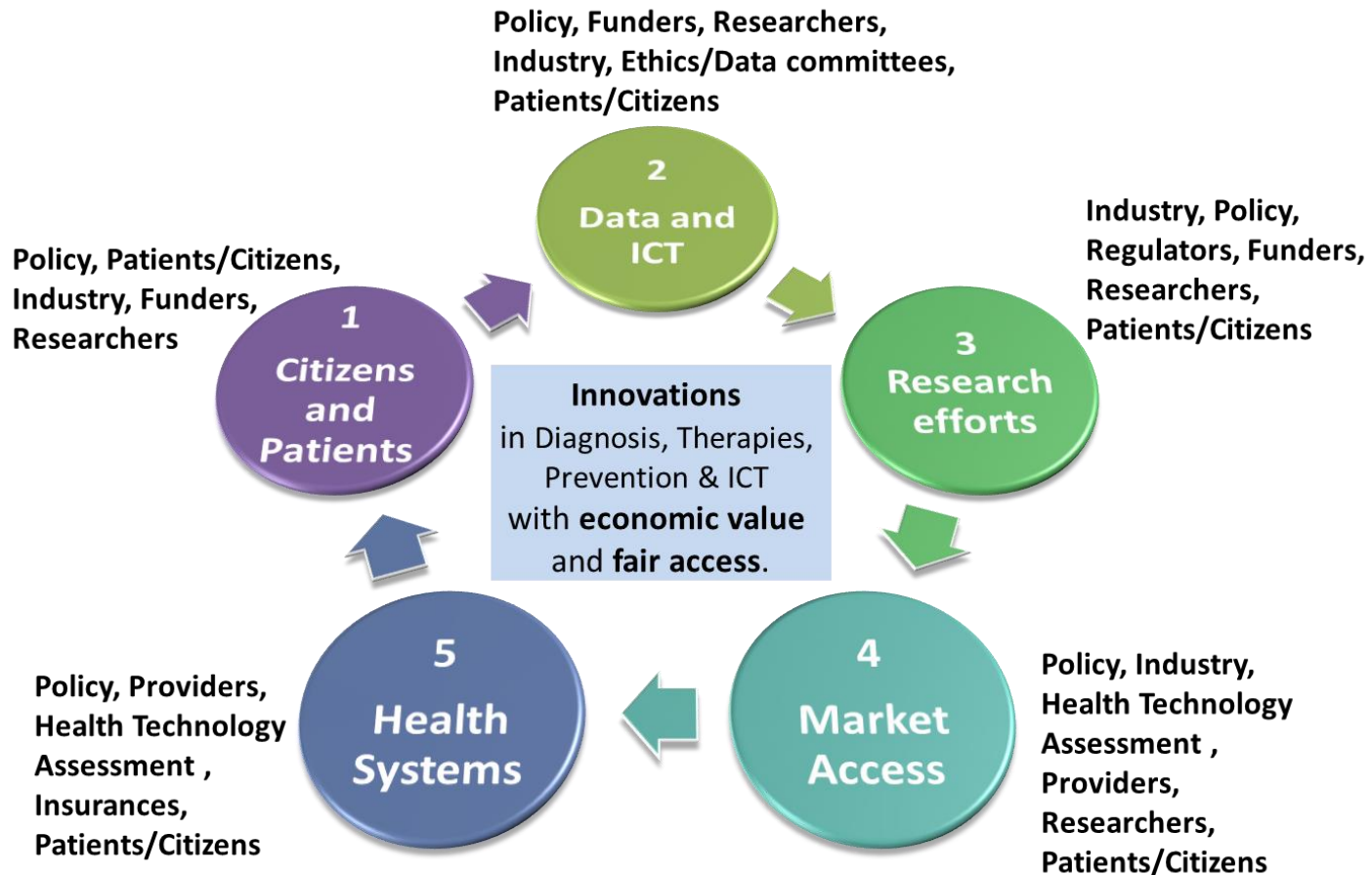
- Establish Europe as a global leader in PM research
- Support the PM science base through a coordinated approach to research
- Provide evidence to demonstrate the benefit of PM to citizens and healthcare systems
- Pave the way for PM approaches for citizens

HOW

- Implementation of a Roadmap based on PerMed Strategic Research Agenda (SRIA)



# Circle of the five Challenges



# State of the play



- **ICPerMed secretariat**, funded by a EC CSA grant
- **Action Plan 2017**: set of activities forming the work programme over the next two years. To be updated
- **ERA PerMed**: a European Research Area Network to align funding of national (and regional) support to trans-national research projects; yearly calls from 2018
- **First ICPerMed Conference 2018**
- ***ICPerMed Vision Paper 2019***



# Members active in the IC PerMed

**• 28 countries and 4 regions**  
**• 11 Health Ministries**  
**• 6 Science and Education Ministries**



- Austria
- Brazil
- Canada + *British Columbia Region*
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- EU as observer
- Finland
- France
- Germany
- Hungary
- Ireland
- Israel
- Italy + *Lombardy Region*
- Lithuania
- Luxembourg
- Moldova
- Netherlands
- Norway
- Poland
- Portugal
- Romania
- Slovenia
- Spain + *Regions Basque Country & Navarre*
- Sweden
- Switzerland
- Turkey



## ERA-NET ON PERSONALISED MEDICINE

**ERA PerMed** is a new ERA-Net Cofund, supported by 32 partners from 23 countries and cofunded by the European Commission. To align national research strategies, promote excellence, reinforce the competitiveness of European players in PM, and enhance the European collaboration with non-EU countries, 31 funding organisations have agreed to launch the first Joint Transnational Call for collaborative innovative research projects in Personalised Medicine (PM).

**Coordinator:**

[Nacional Institute of Health Carlos III – Instituto de Salud Carlos III](#)

**ERA PERMED 1st JOINT TRANSNATIONAL CALL FOR PROPOSALS (2018) IS CURRENTLY CLOSED:** More info [here](#).

### SEARCH

### PRIVATE AREA

[Access for members](#)

# Actions in support ICPerMed

**SAPHIRE:** To establish an inclusive network and support interregional collaborations, identifying needs and activities in line with ICPerMed and smart specialisation strategies

**Regions4PerMed:** To support the regional dimension of ICPerMed and promote personalised healthcare through cooperation and coordination, creating a participatory approach and channelling investments towards Personalised Health



European  
Commission



The Project

Participant organisations

Objectives

Numbers

Approach

Reserved Area

# Interregional coordination for a fast and deep uptake of personalised health

**PROJECT DURATION: 4 YEARS**

Sister Projects

## PARTICIPANT ORGANISATIONS



Research and  
Innovation

### Project information

## REGIONS4PERMED

Grant agreement ID: 825812

Status

Ongoing project

Start date

1 November 2018

End date

31 October 2022

Funded under:

H2020-EU.3.1.6.

Overall budget:  
€ 1 720 000

EU contribution  
€ 1 677 500



Coordinated by:

FONDAZIONE TOSCANA LIFE SCIENCES

Italy



European  
Commission

DEPARTMENT OF  
ECONOMY  
SCIENCE &  
INNOVATION



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[Home](#) > [News](#) > The SAPHIRE project on Securing Adoption of Personalised Health in Regions has been started.

## The SAPHIRE project on Securing Adoption of Personalised Health in Regions has been started.

Nieuws

10 December 2018

### Coordination and support action

The development of personalised medicine (PM), stratified or precision medicine is an evolution that cannot be stopped anymore. PM is strongly technological driven and will induce a transformation of how health and well-being are approached, and medicine is being implemented.

The convergence of knowledge on what determines health and disease or how the process of ageing is determined, with digital technologies and access to data opens a huge potential to develop new applications to improve general health, wellbeing, and will make preventive medicine reality.

To stimulate developments in personalised medicine and support the uptake in all European regions, including sparsely populated and remote regions, **the EU recently awarded a coordination and support action on Securing the Adoption of Personalised Health in Regions - SAPHIRE**. The project is meant as a support to the agenda of the International Consortium of Personalised Medicine (ICPerMed), which was formally established in November 2016 at the initiative of the European Commission.

### Members

SAPHIRE started on 1 December 2018 and is coordinated by the **Department Economy, Science and Innovation (EWI)** of the Flemish Government.

The other consortium members are the Regional Agency for Public Health and Social Well-being (PHA) from Northern Ireland, Hungary-based EIT Health Innostars and the EuroBioForum Foundation (The Netherlands), which was an important driving actor to support PM in Europe since 2011.

### CONTACT DETAILS

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Afdeling Onderzoek  
Navorser

[Send an email](#)

02 553 57 71

### Project information

## SAPHIRE

Grant agreement ID: 825046

Status

Ongoing project

Start date

1 December 2018

End date

30 November 2021

Funded under:

H2020-EU.3.1.6.

Overall budget:

€ 1 853 813,13

EU contribution  
€ 1 778 813



Coordinated by:

VLAAMSE GEWEST

Belgium

### Participants (3)

Sort alphabetically ↕

Sort by EU Contribution ↕



**REGIONAL AGENCY FOR PUBLIC HEALTH AND SOCIAL WELL-BEING**

United Kingdom



**EIT HEALTH INNOSTARS EV**

Germany



**STICHTING EUROBIOFORUM**

Netherlands

Research and  
Innovation

# Mapping regional Health R&I priorities



## ■ Available data

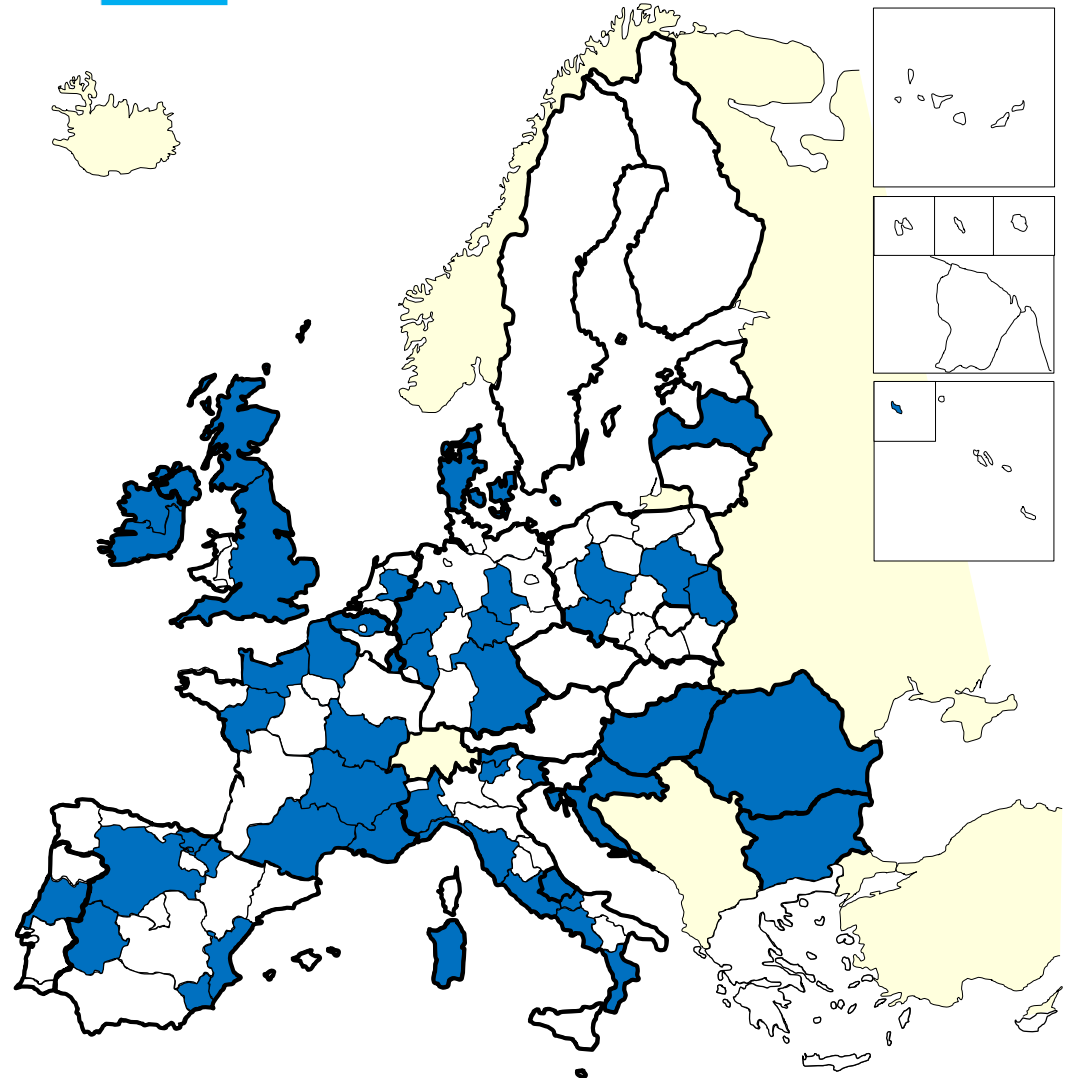
- RIS3, publicly available documents (in various languages, at various NUTS levels)
- 136 RIS3 available on the web have been analysed
- Health R&I priorities extracted from the RIS3
- Regional authorities contacted for comments.

**"Regional Innovation Strategy - Provence-Alpes-Côte d'Azur Region - 2014"**. One of the 5 areas for strategic activities is: (3) "Health and Food" (page 28): (3.1) Improving the management of the patient with early detection, assistance to medical diagnostic and the development of medical devices: (3.1.1) Predictive biomarkers for improving disease prevention; (3.1.2) In vivo imaging; (3.1.3) Immunotherapy; (3.1.4) Areas of neuroscience, oncology, infections; (3.1.5) Development of the Eurobiomed cluster on **personalised medicine**, chronic diseases and rare diseases. (3.2) Developing e-health solutions: (3.2.1) processing and interpretation of medical images; (3.2.2) telemedicine. (3.3) Preventing disease through the promotion of the Mediterranean diet.

# Personalised Medicine in the RIS3 priorities

53 RIS3 out of the 135  
analysed, explicitly  
prioritise **Personalised  
Medicine (38%)**

-  No Personalised Medicine priority
-  Personalised/stratified/precision Medicine priority







European



## SMART SPECIALISATION PLATFORM

European Commission / Smart Specialisation Platform / Sections / Thematic Platforms / Industrial Modernisation / Thematic Areas / **Personalised medicine**

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### Thematic Platforms

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[Energy](#)

[Industrial Modernisation](#)

[How does it work](#)

### Personalised Medicine

#### Flash news

Monitoring reports containing a management report and a progress report prepared by the Lead Region(s) are available here:

[Monitoring report covering the period from January to June 2018](#)

[Monitoring report covering the period from July to December 2019](#)

#### Description

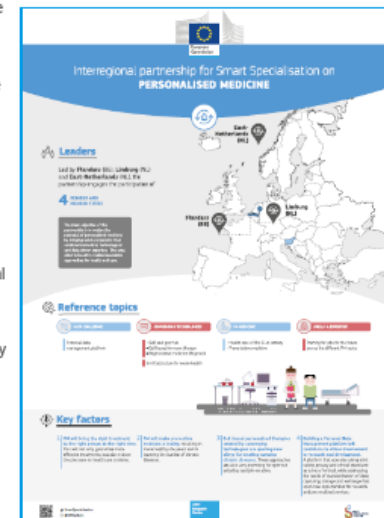
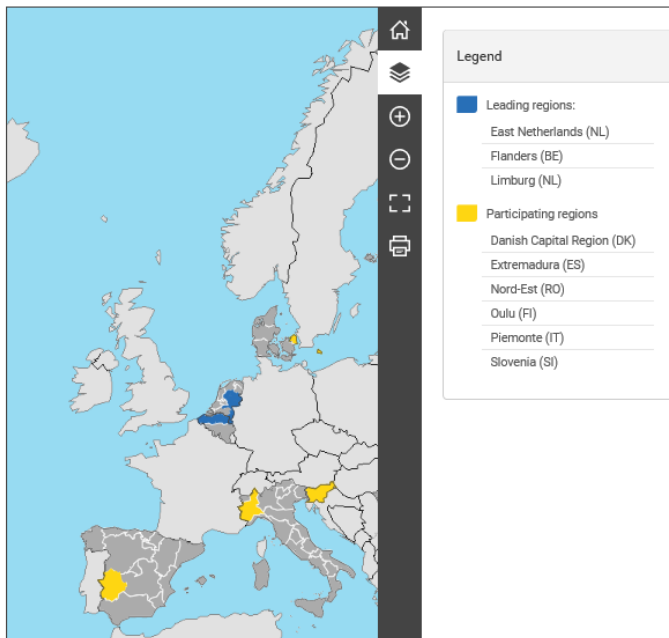
The development of personalised medicine (PM), stratified or precision medicine is an evolution that cannot be stopped anymore. PM is strongly technological driven and will induce a transformation of how health and well-being are approached and medicine is being implemented. The convergence of knowledge on what determines health and disease or how the process of ageing is determined, with digital technologies and access to data opens a huge potential to develop new applications to improve general health, wellbeing, and will make preventive medicine reality.

The sensitivity of new diagnostics, access to omics data and the acknowledgement that early detection is often crucial, is blurring the boundaries between health and disease. Chronic diseases, often linked to changes in general life styles and increasing of the average age of the population are putting the healthcare systems under increasing pressure. The development of PM will not only support the increase of healthy life years, it will also secure the sustainability of our healthcare systems.

The partnership was established to realise the potential of personalised medicine. This partnership will be complementary to the thematic platform on Medical Technologies and will bring the agenda to implement personalised medicine to the next level.

The partner regions already have solid ecosystems combining biomedical,

#### List of Regions involved





# EUROPEAN RESEARCH & INNOVATION DAYS

24 → 26  
SEPTEMBER

20  
19

KANAL  CENTRE POMPIDOU  
Brussels, BELGIUM

#RiDaysEU  
@EUScienceInnov

# Personalised Medicine and the Regional Dynamics

## Challenges

- *The place of the regions in the value chain of personalised medicine and the need for inter-regional cooperation, including cross-border.*
- *The translation of research and innovation into the healthcare.*
- *The synergies between the different research and innovation programmes and their link with the needs of the EU healthcare systems.*

# Personalised Medicine and the Regional Dynamics

## ICPerMed views

- *Many regions have develop regional strategies.*
- *Best practice and lessons learned often originates and becomes reality at the regional level.*
- *Significant datasets at the regional level already exist and could be made accessible*
- *National and regional health systems differ in several aspects and in the way personalised medicine approaches have been implemented.*
- *Ongoing activities need to be visualised as it will bring added value and synergy, avoid duplication, affect the whole PM landscape, sustain more rapid and effective implementation, and promote research collaboration.*

# Thank you

