Integrating China in the International Consortium for Personalised Medicine

"Policies and programmes in the field of Personalized Medicine: first results of the mapping activities of the IC2PerMed project"

Integrating China in the International Consortium for Personalised Medicine

An Overview of Project aims, activites, expected results

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Description of the action

*IC2Permed is a **Coordination and Support Action (CSA)** project, funded from the European Commission in support of the ICPerMed network.*

CSAs consist primarily in accompanying measures such as **standardisation, dissemination, awareness-raising and communication, networking, coordination or support services, policy dialogues and mutual learning exercises and studies**, including design studies for new infrastructure and may also include complementary activities of strategic planning, networking and coordination between programmes in different countries.

The Vision of the Project

IC2PerMed's vision is to become an **efficient lever for supporting EU-China collaboration for the development of Personalized Medicine research and innovations through the ICPerMed initiative** (that involves 40 partners from 31 Countries), enabling populations to access personalised, smart and inclusive healthcare solutions in the near future

Project ID

- European Union: Horizon 2020 CSA - Coordination and support action (SC1-HCO-01-2018-2019-2020)

- Starting Date : January 1st, 2020

- Duration : 48 months

- Consortium : 10 Partners

The Context

❑ Thanks to advances in biomedical and digital technologies, **Personalised Medicine (PM) improves healthcare** and underpin more **efficient and sustainable health systems**

❑ **China it is attracting massive interest**, with the government capitalising on its expertise in biotechnology, computing hardware and producing infrastructures for supporting bioinformatics projects.

❑ **Turning PM into an opportunity for citizens and patients** requires the engagement of stakeholders internationally **to define common research and development approaches**, standards and priorities. In order to respond to these challenges, **the EU supports actions developed within the International Consortium for Personalised Medicine** (ICPerMed).

❑ **The EU-funded IC2PerMed project will provide key solutions for enabling the convergence under ICPerMed of European and Chinese stakeholders towards a common approach of PM, involving policymakers and healthcare beneficiaries**

Governments

↓

Research priorities

↓

Healthcare systems

↓

Practitioners

↓

Citizens
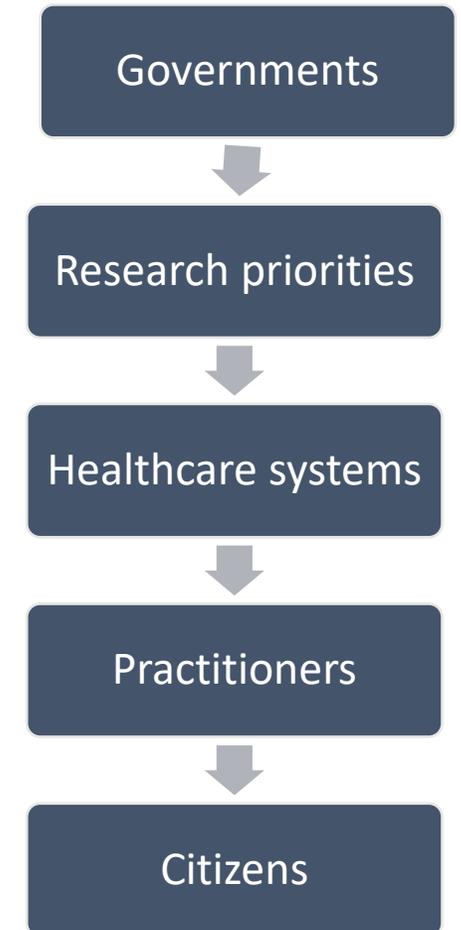
IC2PerMed

IC2PerMed within the ICPerMed 'Family'

ICPerMed
INTERNATIONAL CONSORTIUM

A growing community at work to build a **common approaches** of Personalised Medicine research, development, innovation and regulation

EU-China cooperation

ICPerMed

CSA ICPerMed SEC
CSA SAPHIRe
CSA Regions4 PerMed
ERA PerMed
CSA EULAC PerMed
CSA SINO-EU PerMed
CSA HEco PerMed
CSA EU-Africa
CSA IC2Per-Med
CSA PERMIT

EC funded RI-Projects
EJP RD
1 Million Genome
Nationally funded RI-Projects
Other related ERA-Nets & JPIs
ESFRI
IMI

Member state driven initiatives
CSAs in the context of ICPerMed
Planned CSAs in the context of ICPerMed
Research-funding initiatives
Research infrastructures

The Kick-off meeting in Rome- February 2020

Il Messaggero.it

Europa-Cina, al via il progetto "IC2PerMed" per la Medicina personalizzata

ROMA > NEWS

Lunedì 17 Febbraio 2020

Un ponte Europa–Cina per la ricerca nella Medicina Personalizzata: è questo "IC2PerMed - Integrating China in the International Consortium for Personalised Medicine" il progetto finanziato dal Programma Europeo Horizon2020 nella call "Actions in support of the International Consortium for Personalised Medicine" (SC1-HCO-01-2018-2019-2020), che prende il via oggi nel kick-off meeting che si svolgerà fino a mercoledì 19 febbraio presso il Centro Congressi Europa del campus di Roma dell'Università Cattolica (L go F. Vito, 1).

WFPHA - World Federation of Public Health Associations
18 febbraio · 🌐

Bettina Borisch, Walter Ricciardi, & Marta Lomazzi at the Kick-off Meeting of #IC2PerMed: Integrating China in the International Consortium for Personalised Medicine.

Università Cattolica del Sacro Cuore FONDAZIONE TELETHON Tsinghua University Steinbeis Fondazione Policlinico Universitario Agostino Gemelli IRCCS

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sir Agenzia d'informazione

Sanità: Università Cattolica, al via il progetto di ricerca "IC2PerMed" con la Cina per la medicina personalizzata

17 febbraio 2020 @ 19:17

⊹ICPerMed
INTERNATIONAL CONSORTIUM

ICPerMed

Integrating China in the International Consortium for Personalised Medicine: Kick-off meeting of new ICPerMed-related project

16 December 2019 – IC2PerMed, a new ICPerMed-related coordination and support action, will hold its kick-off meeting on February 17-19, 2020 in Rome, Italy.

IC2PerMed aims at providing key solutions for enabling the convergence of European and Chinese stakeholders under ICPerMed, towards a common approach of personalised medicine research, innovation, development and implementation. The project wants to achieve this by:

1. mapping policies, programmes, standards and initiatives related to personalised medicine in Europe and in China for identifying the opportunities for research collaborations;
2. structuring its developments upon an ecosystem of European and Chinese experts, collaborating in working groups centred on ICPerMed Action plan priorities;
3. setting bridges with key organisms involved in the definition and implementation of personalised medicine and healthcare systems in both economic areas, both on benefits for coordinated approaches for research and on concrete developments taking place within and along the project;
4. inserting its developments in international contexts, through ICPerMed and its involvement in relevant initiatives and networks.

Sanità24 Il Sole 24 ORE

NOTIZIE FLASH

Europa-Cina, al via il progetto "IC2PerMed" per la medicina personalizzata

UCSC Staff in IC2PerMed

Stefania Boccia
Co-Principal Investigator

Walter Ricciardi
Principal Investigator
WFPHA, President
Mission Board on Cancer,
President, Horizon Europe

Antonio Giulio de Belvis
Supporting Investigator

Laura Motta
Grant manager

Sabrina Montante
Brussels liaison office

Chiara Cadeddu
Project Manager

IC2PerMed

UCSC involvement in shaping Public Health Genomics policies in the EU

"Public health Genomics is the responsible and effective translation of genome-based knowledge and technologies into public policy and health services for the benefit of population health'" (Bellagio Statement, 2006)

The Public Health Genomics European Network (PHGEN)

Beyond Public Health Genomics

A Framework for Future Personalised Healthcare

Ron Zimmern, Hilary Burton, Sowmiya Moorthie, Laura Blackburn and Stefania Boccia

A DISCUSSION PAPER

Commentary

Beyond public health genomics: proposals from an international working group

Stefania Boccia[1], Martin Mc Kee[2], Roza Adany[3], Paolo Boffetta[4], Hilary Burton[5], Anne Cambon-Thomsen[6], Martina C. Cornel[7], Muir Gray[8], Anant Jani[8], Bartha Maria Knoppers[9], Muin J. Khoury[10], Eric M. Meslin[11], Cornelia M. Van Duijn[12], Paolo Villari[13], Ron Zimmern[14], Alfredo Cesario[15], Anna Puggina[1], Marco Colotto[1], Walter Ricciardi[1]

New challenges of public health: bringing the future of personalised healthcare into focus

Walter Ricciardi[1,2], Stefania Boccia[1]

IC2PerMed

The Personalized Prevention of Chronic Disease (PRECeDI) project

- **Consortium**: 11 Partners
- **Period**: Jan, 2015-Dec, 2018

Public Health Genomics

Research Article

Public Health Genomics
DOI: 10.1159/000504652

How to Integrate Personalized Medicine into Prevention? Recommendations from the Personalized Prevention of Chronic Diseases (PRECeDI) Consortium

Stefania Boccia[a,b]   Roberta Pastorino[b]   Walter Ricciardi[a,b]   Róza Ádány[c]
Floris Barnhoorn[d]   Paolo Boffetta[e,f]   Martina C. Cornel[g]   Corrado De Vito[h]
Muir Gray[i]   Anant Jani[j]   Michael Lang[k]   Jim Roldan[l]   Annalisa Rosso[h]
José Manuel Sánchez[l]   Cornelia M. Van Dujin[m,n]   Carla G. Van El[g]   Paolo Villari[h]
Ma'n H. Zawati[k]

2nd "Best Practice in Personalised Medicine"
ICPerMed Recognition 2019
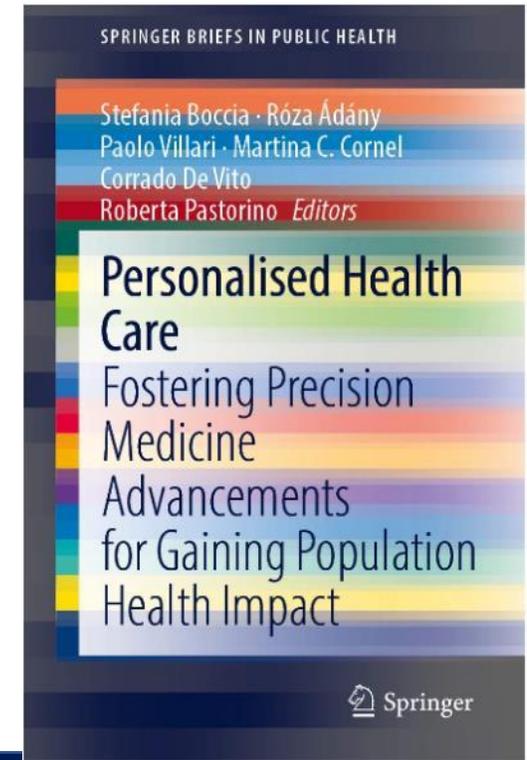
A Success Story recognition from the EC

SPRINGER BRIEFS IN PUBLIC HEALTH

Stefania Boccia · Róza Ádány
Paolo Villari · Martina C. Cornel
Corrado De Vito
Roberta Pastorino *Editors*

Personalised Health Care
Fostering Precision Medicine Advancements for Gaining Population Health Impact

Springer

Personalised medicine for disease prevention

Medical practitioners are increasingly adopting a 'personalised medicine' (PM) approach involving individually tailored patient care. An EU-funded project is fostering collaboration on PM research and training, with special emphasis on the prevention of chronic diseases.

IC2PerMed

The European network staff eXchange for integrAting precision health in the health Care sysTems (ExACT) project

✓ **Consortium**: 17 Partners

 ➢ 7 EU Countries (Belgium, Germany, Greece, Italy, Netherlands, Spain, UK)
 ➢ 1 Associated country (Switzerland)
 ➢ 2 Third Countries (USA and Canada)
   of which
     ➢ 10 Academic
     ➢ 7 Non Academic

✓ **Duration**: 48 months

✓ **Starting Date**: March, 2019

✓ **Secondments**:
   ✓ 74 researchers in secondment

Precision Health & Sustainability
@PHS_projects

EU funded ExACT project, with a multidisciplinary approach, is dedicated to integrating precision health in health care systems

🔗 exactproject.net

Editorials

Personalized prevention and population health impact: how can public health professionals be more engaged?

Stefania Boccia[1,2], Walter Ricciardi[1,2]

Collaboration between China and the EU

❑ In December 2015, the **China-EU Co-Funding Mechanism on research and innovation** (CFM) cooperation was launched and has played a significant role in supporting win-win cooperation

❑ The EC and the <u>Ministry of Science and Technology of the People's Republic of China (MOST)</u> agreed to the renewal of the CFM for the years **2018-2020** to support joint projects between European and Chinese universities, research institutions and companies

❑ This collaboration plays an important role **in jointly addressing global challenges**, therefore both partners aim to improve framework conditions for cooperation on innovation

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IC2Permed approach

01. Mapping

Identifying Chinese and EU appropriate policies, programmes, stakeholders and standards to consider and involve in developments; Envisioning benefits for healthcare ecosystems and benefits for populations

02. Expertising

Building upon exchanges between experts in PM domains for fostering actionable approaches

03. Exemplifying

Setting concrete practices of successful collaboration over a PM core thematic (biobanks) for illustrating and inspiring research collaborations

04. Engaging

Creating strong bridges with key stakeholders from the EU, China and beyond, integrating Chinese stakeholder in ICPerMed and liaising with international peers

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IC2PerMed

IC2PerMed Pert Chart

WP4: Communication, dissemination, outreach and exploitation

WP1: Mapping of PM policies and programmes in Europe and China

WP2: Knowledge synthesis on the identification, transferability and scaling up of international standards in personalized medicine

WP3: Forster research collaboration between EU and China

WP5: Project management

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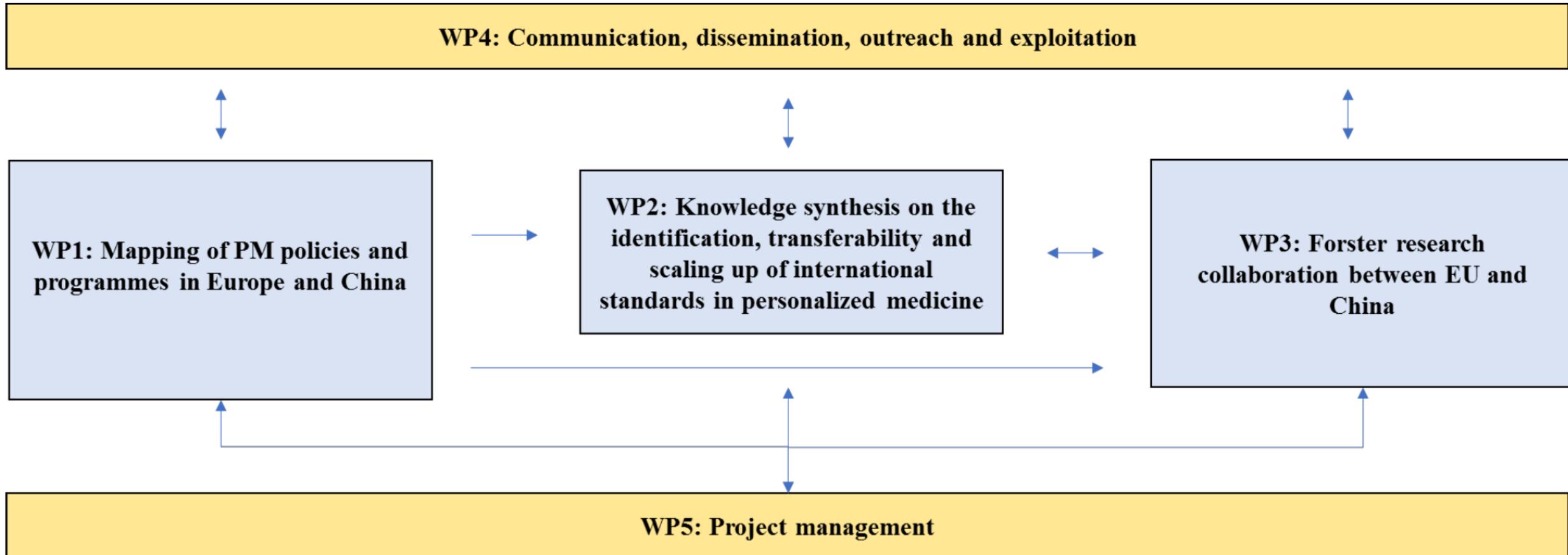
Advisory Board members

- **Wen Mao**, temporarily replaced Tianyu Shen - Geneva and Zili Huang – Shanghai (World Economic Forum Beijing Representative Office, International)

- **Usman Khan** (FIPRA, Europe)

- **Jie Huang** (National Institute for Food and Drug Control, China)

- **Mao You** (China National Health Development Research Centre, China)

- **Martina Cornel** (Community Genetics & Public Health Genomics, Amsterdam UMC , Netherlands)

- **Anant Jani** (Department of Primary Health Care Sciences, University of Oxford, UK)

- **Gaetano Guglielmi** (Department of Prevention, Italian Ministry of Health)

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Project developments

Mapping of Personalised Medicine's policies and programmes in Europe and China

Working groups: Community of EU and Chinese PM stakeholders analysing and designing a **roadmap** for developments upon PM R&I schemes for facilitating the integration of Chinese stakeholders in ICPerMed activities by the relevant agencies

Working Group Leaders

Experts

Associated stakeholders

Working Group 1	Working Group 2	Working Group 3
• Developing awareness and empowerment • Shaping sustainable health care	• Big data and ICT Solutions • Bringing innovation to market	• Translating basic to clinical research and Beyond • Research Funding
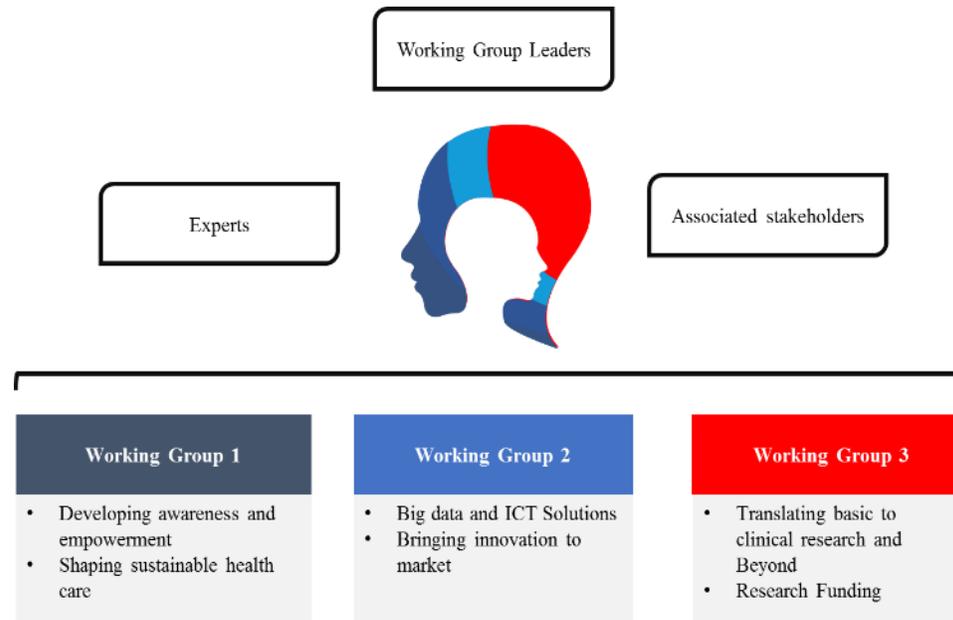
Delegations visits Creating a solid framework for collaboration formalising engagement of relevant Chinese stakeholders within the ICPerMed initiative

IC2PerMed

Working Group framework Set-up

3 Collaborating WGs to define frameworks for implementing the ICPerMed's Action Plan into China by providing insights on the current status of implementation of PM approaches in EU and China
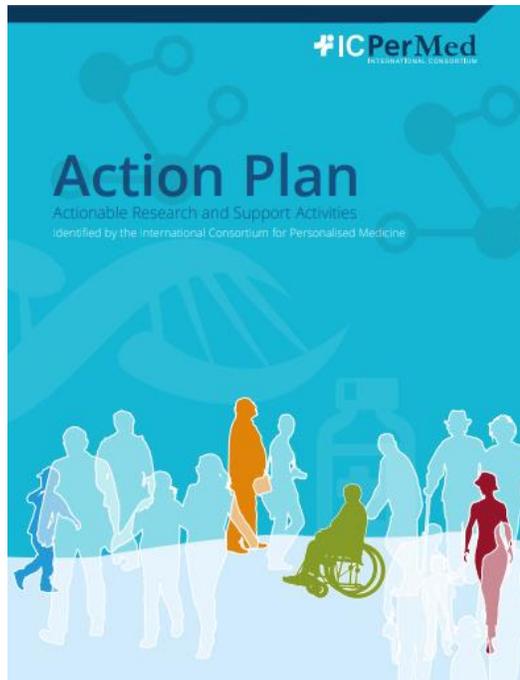
WG	Challenges
WG1	Shaping sustainable health care
WG2	Innovation and Market
WG3	Research and Clinical Studies in PM

Experts identified n. 35

❖ *Europe 75%*

(Italy, Estonia, The Netherlands, Spain, Hungary, Belgium, Germany, United Kingdom, Switzerland, Denmark, France, Austria, Finland)

❖ *China 20%*

❖ *Canada 5%*

Expected Impacts (1/2)

Strategic Policy Level Cooperation Impacts:

❑ Create an **innovative framework** for European and Chinese policy stakeholders to act upon concrete steps towards the implementation of PM in their own countries

❑ Ensure that the necessary **regulations for the transnational deployment** of PM encompass the right level of technical, social and business considerations for fostering its uptake and implementation.

❑ Review and discuss the scope for **harmonisation of policies** between EU and China for integrating PM principles in respective research collaboration schemes focusing on health

Expected Impacts (2/2)

Research and Science collaboration:

❑ Help EU and China shape future **research collaboration frameworks** for fostering scientific and technological exchanges regarding PM

❑ Define the areas for research, technologies and systems to achieve the structuring of an approach to **improve social and healthcare systems** putting PM-related ethical, equity, data security and trust at the core of future developments and assess its social impacts

EU-China PM Research, Development and Innovation ecosystems:

❑ Identify the key PM **standards, interoperability schemes and pragmatic measures** necessary to enable joint R&D&I initiatives, notably under the ERA PerMed framework

❑ Compare healthcare economic principles' realities with **ethical and regulatory frameworks** from both EU and China areas in the fields of PM and define best practices for implementing the adapted measures and tackle fragmentation of approaches

IC2Permed supports the implementation of

SUSTAINABLE DEVELOPMENT GOALS

3 GOOD HEALTH AND WELL-BEING

IC2PerMed

Keep in touch

- Stay tuned, check IC2PerMed website and link with its social media

- For more information on, how to get involved, etc. please get in touch with EU / Chinese contacts

- You will be contacted by e-mail following this event for further contributing to developments

European contacts	Chinese contacts
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Thank you for the attention

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