



**“Policies and programmes in the field of  
Personalized Medicine: first results of the  
mapping activities of the IC2PerMed project”  
个性化医疗领域的政策和计划：IC2PerMed  
项目梳理活动的初步结果**

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10:50 – 11:05

**SHIFTING THE MAPPING RESULTS IN A ROADMAP FOR PM: NEXT STEPS FOR THE KNOWLEDGE SYNTHESIS ON THE IDENTIFICATION, TRANSFERABILITY AND SCALING UP OF INTERNATIONAL STANDARDS IN PM**

在个性化医疗的路线图中转移梳理结果：个性化医疗中国际标准的确定、可传递性和规模扩张的知识综合的后续步骤

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## WP 2- Knowledge synthesis on the identification, transferability and scaling up of international standards in personalized medicine

### WP 2-个性化医疗中国际标准的确定、可传递性和规模扩张的知识综合

**Aim:** co-designing the appropriate framework and strategies fostering Chinese integration in ICPerMed consortium is the core objective of WP2. EU and Chinese high-level experts engaged within this WP will set the path for qualifying standards, approaches and priorities for collaboration.

**目标:** 共同设计适当的框架和策略以将中国纳入ICPerMed联盟是WP2的核心目标。参与此WP的中欧高级专家将为限定合作的标准、方法和重点设定道路。

#### Specific objectives 具体目标:

1. Setting up Working Groups that will support the Consortium towards the common definition, approaches and thematics for EU-Chinese research collaborations 成立工作组，以支持联盟就中欧研究合作达成共同的定义、方法和主题
2. Analysing and discussing frameworks and potential recommendations aligned with ICPerMed Action plan priorities towards policy makers 分析并讨论针对决策者的与ICPerMed行动计划优先事项相一致的框架和潜在建议
3. Co-defining the IC2PerMed Roadmap for the uptake of PM approaches in health 共同定义在医疗中采用个性化医疗方法的IC2PerMed路线图

# Project developments: Where are we?

## 项目发展：我们在哪？

**Mapping of Personalised Medicine's policies and programmes in Europe and China**  
梳理欧洲和中国的个性化医疗政策和计划

### Working groups 工作组：

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

欧盟和中国的个性化医疗利益相关者共同体，分析和设计个性化医疗研究与创新方案的发展路线图，以促进相关机构将中国的利益相关者纳入ICPerMed活动

Working Group Leaders

Experts

Associated stakeholders



Working Group 1

Shaping sustainable healthcare 塑造可持续发展的医疗

Working Group 2

Innovation and Market 创新与市场

Working Group 3

Research and Clinical Studies in PM 个性化医疗的研究与临床试验

### Delegation visits

Creating a solid framework for collaboration formalising engagement of relevant Chinese stakeholders within the ICPerMed initiative

### 代表团访问

建立一个坚实的合作框架正式使相关的中国利益相关方参与ICPerMed计划

# Expertising: The strategy

## 专业知识：策略



### 02. Expertising

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

- ✓ In each WG High-level experts in their field will work together with members of IC2PerMed on developing overarching strategies and solutions for their specific topic. 在每个工作组中，各自领域的高级专家将与IC2PerMed成员一起为特定主题制定总体策略和解决方案。
- ✓ Groups Co-chaired by a representative from a European and a Chinese counterpart of the IC2PerMed Project - Coordination among WGs will be ensured by the two Co-Chairs. 工作组由IC2PerMed项目的中欧双方代表共同担任主席-工作组之间的协调由两位共同主席确保完成。

# Overview of the Working Groups

## 工作组概览



### Working Group 1: SHAPING SUSTAINABLE HEALTHCARE (PEOPLE AND ORGANISATION)

#### 工作组1：塑造可持续的医疗（人员和组织）

**Aim:** To define a common *organizational* strategy to support a *sustainable* translation of PM from *research* to *practice* at 3 levels:

**目标：** 定义一个通用的**组织**策略，以支持在3个层次上将个性化医疗从**研究可持续地转化为实践**：

- 1) Micro: Hospitals, healthcare facilities 微观： 医院和医疗机构
- 2) Meso: Integrated care, local authorities 中观： 综合护理和地方当局
- 3) Macro: Health system 宏观： 医疗体系

Guiding IC2PerMed partners: UCSC and Tsinghua  
指导IC2PerMed合作伙伴：UCSC和清华大学

# WG1: a three dimensional outlook

## WG1: 三维观点



### I. AWARENESS AND EMPOWERMENT

#### 意识和授权

**Focus is on:** Defining common approaches to maximise engagement of citizens and patients, both in the preventive and curative care.

**重点在于:** 定义通用方法，以最大限度地提高公民和患者在预防与治疗方面的参与度。

**Goal:** To include the perspective of citizens, patients and patient organisations in the decision-making processes of public health authorities and to enable a more efficient interaction between them and researchers/healthcare organisations.

**目标:** 将公民、患者和患者组织的观点纳入公共卫生当局的决策过程，使他们与研究人员/医疗组织能够进行更有效的互动。

### II. EDUCATION AND CURRICULA

#### 教育与课程

**Focus is on:** Defining common advanced major changes in **medical and other healthcare provider curricula** (e.g. pharmacists, nurses, biologists and professionals involved in the rehabilitation programs) due to:

**重点在于: 定义医疗和其他医疗提供者课程** (例如药剂师、护士、生物学家和参与康复计划的专业人员) 中共同的重大先进变更, 原因如下:

- ❑ The major technological advances in PM 个性化医疗的重大技术进步
- ❑ Necessity of multidisciplinary teams (bioengineers, statisticians, digital professionals ecc) 跨学科团队 (生物工程师、统计学家、数字专家等) 的必要性

#### **Goals:目标:**

1. To educate a **new generation** of healthcare professionals (long term uptake)教育新一代的医疗专业人员 (长期采用)
2. To update **current professionals** with lifelong learning programmes (faster uptake)通过终身学习计划更新当前的专业人员 (更快地采用)

### III. PM IN SUSTAINABLE HEALTHCARE

#### 可持续医疗中的个性化医疗

**Focus is on:** Harmonising strategies and practices to ensure that PM provides **added value** to health systems by fostering their effectiveness, efficiency and sustainability.

**重点在于:** 协调策略和实践, 以确保个性化医疗通过提高有效性、效率和可持续性为医疗体系提供**附加价值**。

**Goal:** To understand key contextual factors and barriers at **Micro, Meso and System organisational levels** in order to *sustainably* translate PM into routine clinical practice.

**目标:** 了解**微观、中观和体系组织层次**的关键背景因素和障碍, 以便将个性化医疗可持续地转化为常规临床实践。

# Overview of the Working Groups

## 工作组概览



### Working Group 2: INNOVATION & MARKET

#### 工作组2：创新与市场

**Aim:** To discuss **目标:** 讨论

- 1) The international standards, regulatory aspects and market barriers of **medical, genetic and environmental data schemes** as inputs for **diagnosis, treatment, prognosis and drugs developments**.  
医疗、遗传和环境数据方案的国际标准、监管方面和市场壁垒，作为诊断、治疗、预后和药物开发的输入条件。
- 2) Health economic models that can be applied both in EU and China with specific focus on **pricing, insurance coverage and reimbursement**. 在欧盟和中国都可以应用的医疗经济模式，重点是**定价、保险范围和报销**。

*Guiding IC2PerMed partners: S2i and BGI*

*指导IC2PerMed合作伙伴: S2i和BGI*





# WG2: a bi-dimensional outlook

## WG2: 二维观点



### I. BIG DATA AND ICT SOLUTIONS:大数据和ICT解决方案:

**Focus is on:** Encouraging a **harmonised** and **fast** uptake of technologies for data capture, storage, harmonisation, management and data processing

**重点在于:** 鼓励对数据采集、存储、协调、管理和数据处理技术进行**统一而快速**的采用

**Goal:** Define common decision support tools and methodologies for **physicians and public health authorities** in their decision-making process.

**目标:** 为**医师和公共卫生当局**的决策过程定义通用的决策支持工具和方法。

### II. BRINGING INNOVATION TO MARKET:让创新进入市场:

**Focus is on:** From research, development, regulatory approval and **HTA** up to definition of **reimbursement** mechanisms and **implementation** decisions (including regulatory and legal frameworks and guidance)

**重点在于:** 从研究、开发、监管审批和HTA到报销机制和实施决策的定义（包括监管和法律框架与指南）

#### **Goals:目标:**

- ❑ To **speed up** the integration innovative solutions into the Chinese and European PM markets 加快将创新解决方案纳入到中国 and 欧洲个性化医疗市场
- ❑ To enable **companies** to such markets with sustainable business plans. 使公司能够通过可持续的商业计划进入此类市场。

# Overview of the Working Groups

## 工作组概览



### Working Group 3: RESEARCH AND CLINICAL STUDIES IN PM

### 工作组3：个性化医疗的研究与临床试验

**Aim:** To align **clinical research** domains (i.e classification, trials, programmes) collaboration correlated to **bio-banking** (to be further developed in the ‘concrete collaboration case’ of the project).

**目标：** 调整与生物银行相关的临床研究领域（即分类、试验、计划）协作（将在项目的“具体协作案例”中进一步制定）。

*Guiding IC2PerMed partners: FTELE and NCC*

*指导IC2PerMed合作伙伴：FTELE和NCC*

# WG3: a bi-dimensional outlook

## WG3: 二维观点



### I. TRANSLATING BASIC TO CLINICAL RESEARCH AND BEYOND 将基础知识转化为临床研究及更多:

#### Focus is on 重点在于:

- i) developing methods to **integrate and evaluate** genomic, epigenetic, transcriptomic, proteomic, metabolomic and microbiome analyses 开发方法以整合和评估基因组学、表观遗传学、转录组学、蛋白质组学、代谢组学和微生物组学分析
- ii) harmonising **biomarker** evaluation and validation processes 协调**生物标志物**的评估和确认过程;
- iii) encouraging the development of **international longitudinal studies** by harmonising clinical trial designs, sampling procedures, data exchange and reimbursement 通过协调临床试验设计、抽样程序、数据交换和报销, 鼓励发展国际纵向研究。

#### Goal 目标:

Standardising approaches to **translate basic to clinical research**使基础知识转化为临床研究的方法标准化

### II. RESEARCH FUNDING 研究出资

Focus is on 重点在于: aligning research funding priorities and procedures in the field of PM across the relevant Funding Agencies in EU and China.

在欧盟和中国的相关出资机构之间, 协调个性化医疗领域的研究出资重点和程序。

#### Goal 目标:

Development of recommendations for policy makers on personalised medicine implementation 为决策者提供有关个性化医疗实施的建议

# HOW DO WE SHIFT THE MAPPING RESULTS IN A ROADMAP FOR PM?

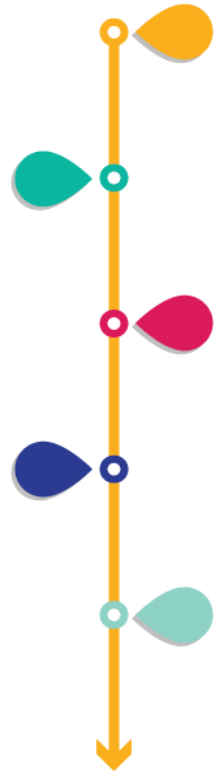
## 我们如何在个性化医疗的路线图中 转移梳理结果？

- 1) Launch of WG activities in **March** 在三月份开展工作组活动
- 2) Set up of **regular meetings among WGs** (most likely remotely) - minutes of the meetings and working documents will be shared among the WGs to ensure synergies, integration among procedures and avoid duplication 在工作组之间召开例行会议（很可能是远程会议）-各工作组将共享会议记录和工作文件，以确保协同增效、程序之间的整合并避免重复
- 3) Release **Position papers** on WGs' topics - Release of 6 position papers and of a strategic workplan to foster collaboration between ICPerMed and China on PM (Task 2.2 - D2.2 [M24]) 发布关于工作组主题的立场文件-发布6份立场文件和1份战略工作计划，以促进ICPerMed和中国就个性化医疗的合作（任务2.2-D2.2 [M24]）：
  - *Relative Milestone [M18]: By Month 18, WG position paper outlines will be issued and feedbacks from funding agencies and policy makers gathered will be included in the final recommendations, issued by the experts and disseminated through the website of the project* 相对里程碑[M18]: 在每月18日，工作组将发布立场文件大纲，从出资机构和政策制定者收集的反馈意见将纳入最终建议中，由专家发布并通过项目网站进行传播。
- 4) Organization of “**Harmonisation/Alignment workshop**” to discuss position papers on the challenges presented and discussed in a unique event participated by all the WGs members 组织“协调研讨会”，以讨论有关所有工作组成员参加的独特活动中提出和讨论的挑战的立场文件
- 5) Synthesized of Position Papers in a logical sequence of actions that can be concretely undertaken and are outlined in the “**IC2PerMed Roadmap**”, as a basis for interactions with ICPerMed and Chinese Working Agencies in the WP3 (Task 2.3 - D2.3 [M30]). The roadmap will be shared and discussed with relevant stakeholders in the “**IC2PerMed Roadmap Validation**” Workshop. 以具体采取行动的逻辑顺序汇总了立场文件，并在“IC2PerMed路线图”中进行了概述，以此作为与WP3中的ICPerMed和中国工作机构互动的基础（任务2.3-D2.3 [M30]）。



## 02. Expertising

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



WHERE DO  
WE GO  
FROM  
HERE?

我们要去  
到哪里？



*To make sure our collaboration begins on a solid and valuable base of evidence, we kindly ask you to validate our mapping findings by means of a*

## **SURVEY**

*that you will be receiving shortly after this workshop*

为确保我们的合作建立在坚实而宝贵的事实基础上，我们恳请您通过完成**调查**来验证我们的梳理结果，您将在本次研讨会后不久收到该调查





# THE SURVEY 调查

*It has been formulated by all WP1 collaborators and is addressed to country experts, both internal and external to IC2PerMed. 它由所有WP1合作者制定，并发给IC2PerMed内部和外部的国家专家。*

- **The aim** is to explore the current landscape of implementation, priorities, and challenges of Personalised Medicine in China and Europe  
目的是探索中国和欧洲个性化医疗的实施现状、重点和挑战
- **The results** of this survey will be useful to have an overview of the past, current and future policy, research, and funding in PM in each country  
该调查的结果将有助于了解每个国家过去、当前和未来的个性化医疗政策、研究以及出资情况
- They will serve the basis for the IC2PerMed WGs as support in **developing recommendations** for implementing the ICPerMed's Action plan into China  
它们将作为IC2PerMed工作组的基础，为制定在中国实施ICPerMed行动计划的建议提供支持

# 谢谢

*Questions, comments, suggestions?*  
*有问题、意见或建议吗?*



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