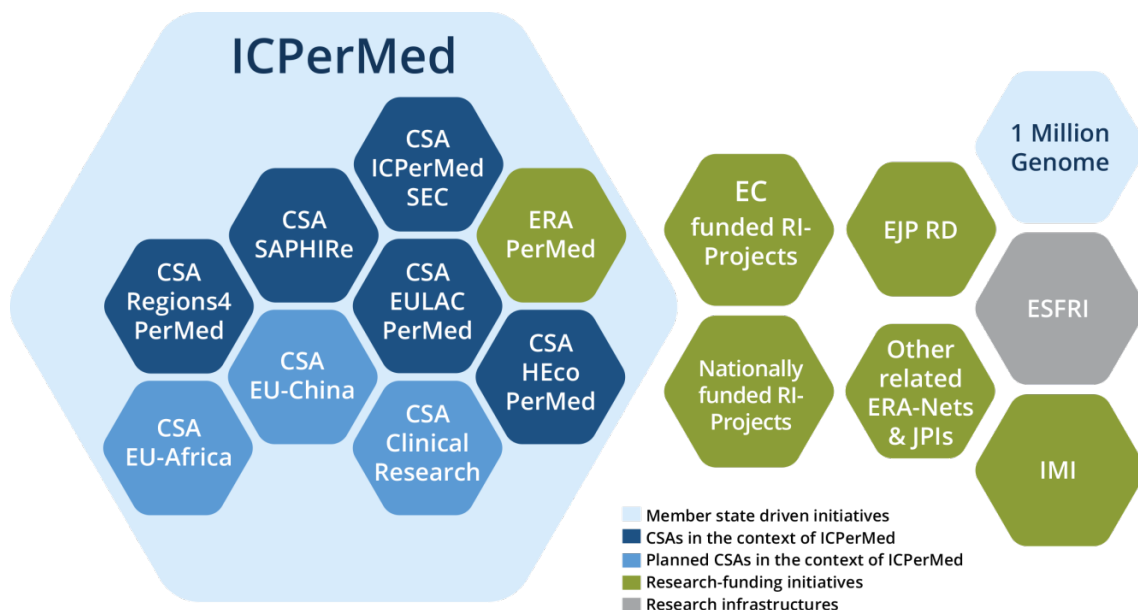


TOWARDS THE IMPLEMENTATION OF PERSONALISED MEDICINE IN EUROPE The Advantage of a European Partnership (EP)

Mandated by **ICPerMed** Executive Committee at their meeting in Tallinn, 04 June 2019 and the **ERA PerMed** Network Steering Committee of at their meeting in Dublin, 08 May 2019, this document describes our commitment for a strong European Partnership in the area of Personalised Medicine.

Personalised Medicine (PM) represents, as a cross-cutting field, a central opportunity for the future of healthcare by providing major benefit to the individual patient and citizen. There is a common understanding among stakeholders, researchers and healthcare providers across borders that PM, due to its great potential for disease prevention, diagnostic and treatment, is a major driver to optimised healthcare. But is Europe prepared for this improvement? One important supportive initiative is the **International Consortium of Personalised Medicine (ICPerMed)** which brings together over 40 European and non-European partners, representing ministries, funding agencies and the European Commission (EC). ICPerMed was established in 2016 and aims at coordinating and supporting research to develop PM approaches in close collaboration with the **European Research Area Network for Personalised Medicine (ERA-PerMed)**, several Coordination and Support Actions (CSAs) funded by the EC, as well as with an increasing number of associated and related initiatives, research infrastructures and capacities in Europe and beyond (see figure 1). This so called “ICPerMed Family” has an important role in supporting the research and implementation of PM in Europe and beyond. Some of them are part of the Science Diplomacy effort of EU and aim to promote exchange between Europe and China, Latin American and Caribbean countries as well as Africa in the future. ICPerMed will continue to foster such initiatives and activities in close collaboration with the EC and carry a leadership role to fulfil the vision for PM in 2030.



About the INTERNATIONAL CONSORTIUM ON PERSONALISED MEDICINE (ICPerMed)

The ICPerMed Action Plan in 2017 defined research and support activities to stimulate PM adoption in healthcare. Leveraging the Action Plan, based in the Strategic and Research and Innovation Agenda (SRIA) developed by PerMed2020 (a project also supported by EU), members have been successful in establishing research, healthcare programs and actions in their countries and regions. The EU already supports many initiatives consistent with the ICPerMed vision for 2030 and, together with ICPerMed, is committed to expand its efforts globally. The perspectives and transversal issues can further orientate policy makers and guide the healthcare community when planning future programs and activities for PM implementation. Europe has the opportunity to capitalize on their research and development efforts as well as on their healthcare system to foster approaches at least on a European scale. This includes synergies and exchanges in order to identify new business models for the implementation of PM in Europe and beyond. ICPerMed will, in close collaboration with the EC, continue to act as a bridge and communication platform for existing and future initiatives and organisations related to PM, paving the way towards the vision of PM. For more information, please visit: www.icpermed.eu/

ICPerMed Vision for 2030

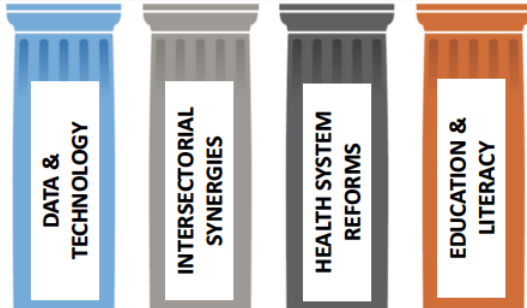
Perspective 1: Informed, empowered, engaged, and responsible citizens

Perspective 2: Informed, empowered, engaged, and responsible health providers

Perspective 3: Healthcare systems that enable personally tailored and optimised health promotion, prevention, diagnosis, and treatment for the benefit of citizens and patients

Perspective 4: Availability and optimal use of health-related information for optimised treatment, care, prevention, and research

Perspective 5: Economic value by establishing the next generation of medicine



The ICPerMed Vision 2030: How will Personalised Medicine transform healthcare by 2030?

ICPerMed considers the increased understanding of biological, lifestyle, and environmental factors that regulate disease onset and progression to be the driving force for the implementation of PM, and thus aims to align and encourage joint efforts in research and implementation. ICPerMed is convinced that investment in research and innovation is a prerequisite for its successful implementation. The ICPerMed vision of how the use of PM approaches will promote “next generation” medicine in 2030, more firmly centred on the individual’s personal characteristics, leading to increased effectiveness, is built on five perspectives supported by four pillars representing transversal issues crucial for PM implementation (see figure 2 on the left). **In 2019 ICPerMed will publish a Vision Paper reflecting on the future of PM.**

About the EUROPEAN RESEARCH AREA NETWORK for Personalised Medicine (ERA PerMed)

Another important initiative is ERA-PerMed which was established in December 2017 and is supported by 32 partners from 23 European and non-European countries and co-funded by the EC, aligning national research strategies, promoting excellence, with patients’ active involvement, reinforcing the competitiveness of European players in PM by tackling the value chain, and enhancing European collaboration with non-EU countries. Participating funding organisations have launched two joint transnational calls so far for collaborative innovative research in PM to fund projects showing clinical feasibility of PM. The two calls include a total investment of 60 Mio. €, and it brings new participating funding organization such as the SRT (Egypt) and SENACYT (Panama) aboard. For more information, please visit: www.erapermed.eu/

The Need of a PERSONALISED MEDICINE EUROPEAN PARTNERSHIP (EP)

The importance of PM in Europe and beyond the European borders is demonstrated by the active participation of the EC supporting the activities related to PM already since FP7 and in Horizon 2020 with a budget of more than 2 billion euros. Therefore, ICPerMed and ERA PerMed are supporting the integration of PM as topics for a future partnership in Horizon Europe. Already a lot has been achieved by a large number of international, pan-European, national as well as regional activities and initiatives. But to further develop and foster promising PM approaches there is a need of an even closer collaboration and effort which could be achieved by a Personalised Medicine EP.

- ICPerMed and ERA-PerMed are open to the world and therefore confident to be the platform for further bilateral and multilateral initiatives in the area of PM. As a co-funding partnership they will have even more impact and they will further strengthen the collaboration with complementary initiatives and relevant stakeholders.
- A concerted effort is needed to make progress; not only national/regional governments, but also European institutions are dealing with questions on how to best govern and implement PM in our healthcare systems. An EP for PM will accelerate the communication and decisions needed with all key players and institutions.
- An EP will promote state-of-the-art understanding and advances in the domain of PM by facilitating the exchange of information, experiences and ideas, and discussing new potential solutions from members and global stakeholders. By including new members as well as relevant institutions, organisations and initiatives, an EP will promote the exchange of ideas and experiences within the growing ICPerMed “Family”, to further evolve the concept and success of PM, like innovations in prevention, diagnosis, therapy, information and communication technology, and to promote economic value and fair access for all citizens to the best possible healthcare.
- There is already sustained commitment from individual members of ICPerMed, ERA-PerMed and the other PM-related CSAs, as well as a readiness to adapt to the demands of evidence based new knowledge, global developments and the expectations of European societies.
- Furthermore a strategy is needed to tackle additional crucial aspects in research and to support future implementation strategies of PM. These should include broader interoperable scientific and clinical use of data, patient involvement and empowerment, adapted regulation procedures and Health Technology Assessments (HTAs), educational aspects, and reimbursement issues related to PM.