EP PerMed
European Partnership
for **Personalised Medicine**

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In-situ visit at the Center for Precision Medicine of the University Hospital Brno (the Czech Republic)

Report of the visit

31.12.2025

Fondazione Toscana Life Sciences (TLS)

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EP PerMed
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for Personalised Medicine

Technical References

Project Acronym	EP PerMed
Project Title	European Partnership for Personalised Medicine
Grant Agreement No.	101137129
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List of abbreviations

EP PerMed	The European Partnership for Personalised Medicine
PM	Personalised Medicine
EC	European Commission
EU	European Union
CSA	Coordination and Support Action
DG-RTD	Directorate-General for Research and Innovation
ICPerMed	The International Consortium for Personalised Medicine
WP5	EP PerMed Work Package 5

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1 Introduction

Personalised Medicine (PM) encompasses research, innovation, and implementation in healthcare systems as key elements for its successful development. These three elements are part of the "PM Value Continuum", the core of the Strategic Research and Innovation Agenda for Personalised Medicine, published in 2023 and founding document of the European Partnership for Personalised Medicine (EP PerMed).

Member states of the European Union, as well as many other countries worldwide, have plans for implementing more PM approaches to leverage its full potential for the individual, patients, companies, and society.

Well-structured strategies and initiatives to foster PM vary greatly from country to country based on wealth level, healthcare system organisation, political prioritisations, and ethical and societal aspects.

Previous EU-funded Coordination and Support Actions (CSAs) have promoted the exchange of best practice and expertise from region to region and, more specifically, between the centres actively involved in PM activities. Each region has been able to provide excellent examples of centres fostering the PM Value Continuum, whose best practice have provided real life proof on how PM can truly be managed and brought to citizens. In-situ visits to these centres of excellence have provided valuable information and insights to the stakeholders' community, especially to policy makers, who have been provided with concrete examples to be considered.

Considering this positive experience and recognising their potential, EP PerMed has included in-situ visits in its planned activities already from the first year.

The present is the report of the second in-situ visit, made by EP PerMed at the Center for Precision Medicine of the University Hospital Brno (The Czech Republic) in November 2025.

2 Details of the visit

Below are reported the details of the visit.

Country	the Czech Republic
Region	South Moravia
Site of the visit	Brno
Date/s	27-28/11/2025
Number of the visit	2

The EP PerMed onsite delegation was composed by:

EP PerMed WP5	Gianni D'Errico, Matteo Gentili (TLS, WP5 lead)
ICPerMed	Etienne Richer (ICPerMed chair); Rizwana Mia and Raili Sillart (ICPerMed vice-chairs)
Local EP PerMed partner	Monika Kocmanova, Ondrej Slaby (CHRC)
Other EP PerMed/ICPerMed partners	**Name of the institution**
	Agence Nationale de la Recherche (France)
	BBMRI-ERIC
	CIHR - Institute of Genetics (Canada)
	DLR (Germany)
	EC DG-RTD
	EIT Health
	Estonian Ministry of Social Affairs
	Flemish Government (VLO-EWI) (Belgium)

	Fondazione Regionale per la ricerca Biomedica (Lombardy Region, Italy)
	Genome Canada
	IHU Prism (France)
	Region Halland (Sweden)
	Sächsisches Staatsministerium für Wissenschaft, Kultur und Tourismus (Saxony Region, Germany)
	Israel Ministry of Health
	South African Medical Research Council
	Tartu University Hospital / University of Tartu (Estonia)
	Vinnova (Sweden)

The visit was organised as a hybrid event, for about 30 attendees from the EP PerMed, ICPerMed and local partner communities. The fact that the visit was organised back-to-back to the first EP PerMed and ICPerMed joint Conference in Prague reinforced the participation of partners from both initiatives. The visit was organised with the collaboration of University Hospital Brno, MUNI MED, CEITEC MU, MUNI CREATIC and AZV ČR.

Fig. 1 | The delegation and local hosts.

3 Agenda

Day 1, Nov. 27th 16:15-18:40 (local time) followed by dinner
Venue: CEITEC MU, Kamenice 753/5

Speaker	**Topic**
Ondrej Slaby (Host) 16:15 – 16:20	*Welcome and introduction by host, EP PerMed and ICPerMed and EC.*
Gianni D'Errico (EP PerMed) + Étienne Richer (ICPerMed) 16:20 – 16:30	
Alexandru Costescu (DG RTD) 16:30 – 16:35	
Ondrej Slaby 16:35 – 17:05	*Presentation of the Center for Precision Medicine (CPM) of the University Hospital Brno*
Maud Kamal 17:05 – 17:35	*IHU PRISM, the first National Centre for Precision Medicine in oncology in France – EP PerMed Best Practice Award Winner*
Eva Bom 17:35 – 18:05	*Regional Healthcare Information Platform in Halland, Sweden – EP PerMed Best Practice Award Winner*
18:05 – 18:40	*Panel discussion and Q&A*
	Dinner

Day 2, Nov. 28th 08:45-13:00 (local time)
Venue: University Hospital Brno, Jihlavská 20

Speaker	Topic
Jaroslav Sterba 09:00 – 09:30	*The NICR and Pediatric Precision Oncology Pro-gramme*
Regina Demlova 09:30 – 10:00	*The Central European Advanced Therapy and Immunotherapy Centre (CREATIC)*
Ales Hampl 10:00 – 10:30	*The Tissue engineering Programme at the Faculty of Medicine, Masaryk University*
10:30 – 11:00	*Networking break*
11:00 – 12:00	*Visit to the laboratories of the Central Euro-pean Institute of Technology at Masaryk Uni-versity Brno (CEITEC MU)*
12:00 – 13:00	*Networking lunch and end of the visit*

4 Aims of the in-situ visit

This in-situ visit specifically aimed at:

- Providing real life examples of successful PM research, innovation and its implementation into healthcare systems as well as discussing challenges and learnings.
- Informing EP PerMed stakeholders' community about specific PM ongoing activities in EU member states.
- Fostering the exchange of best practice among national and regional centres and in general among stakeholders involved in the PM Value continuum. Reason why IHU PRISM and Region Halland were invited to present.
- Promoting the growth of less advanced centres active on PM or help setting the basis for future initiatives.

- Helping with the identification of centres of excellence to be evaluated for the task 5.3.1 "Best Practice Awards".
- Favouring the involvement of funding agencies and decision makers in the International Consortium for Personalised Medicine (ICPerMed)
- Strengthening existing collaborations on PM or promote the creation of new ones.
- Through dialogue identifying needs and opportunities that can support future updates of the EP PerMed SRIA and future activities.

5 The Center for Precision Medicine of the University Hospital Brno

The Center for Precision Medicine of the University Hospital Brno brings together experts from various fields of precision medicine and their clinical and research activities into one joint interdisciplinary center.

The Center aims at coordinated and efficient development in this field, which will also enable rapid implementation of new technologies and approaches of precision medicine into clinical practice and thus ensure the availability of the most advanced diagnostic and therapeutic solutions for patients of the University Hospital Brno.

University Hospital Brno is a pioneer across various fields of precision medicine in the Czech Republic. Beginning with precision oncology in pediatric patients, where the Department of Paediatric Oncology became the first in the Czech Republic and the entire CEE region to implement these precision medicine into practice a decade ago to the area of undiagnosed pediatric patients, where the first outpatient clinic for undiagnosed pediatric patients in the Czech Republic was opened at the Department of Pediatrics of the University Hospital Brno in September 2023.

The successful introduction of precision medicine into clinical practice at the University Hospital Brno has resulted in hundreds of successfully treated cancer

patients, children who, after many years of diagnostic odyssey, received their genetic diagnosis, their siblings who were born healthy, and human stories that would never have happened without precision medicine and the medical specialists of the University Hospital Brno.

Text has been reproduced from ***https://www.fnbrno.cz/en/center-for-precision-medicine/t7823****.*

6 Talks

6.1 Day 1 – November 27th 2025

6.1.1 Presentation of the Center for Precision Medicine (CPM) of the University Hospital Brno

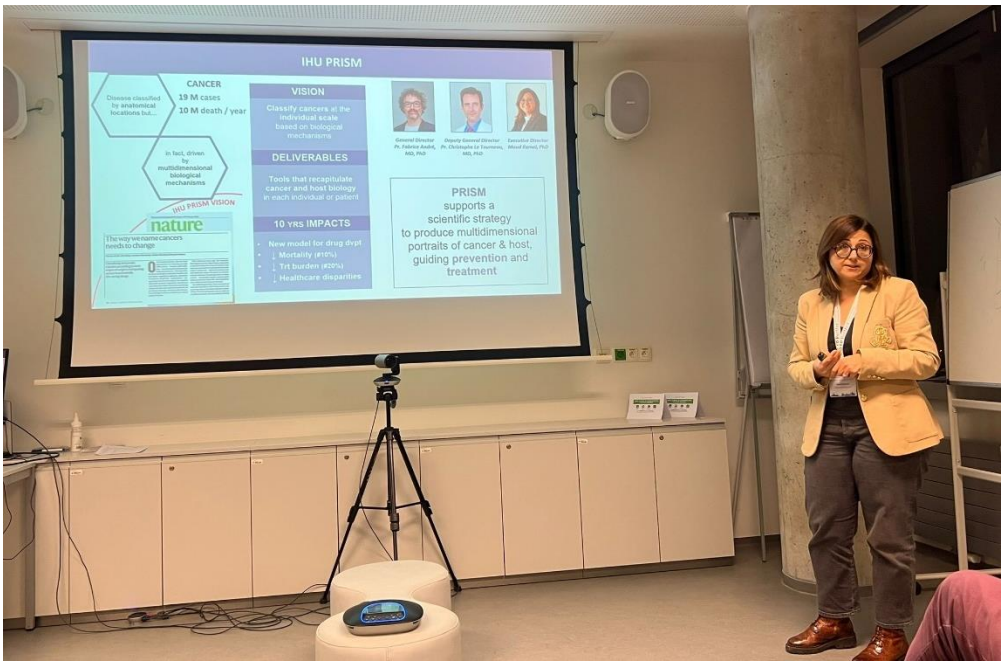
Speaker: Ondrej Slaby
Speaker's role/title: Chairperson of the Czech Health Research Council | Head of the Center for Precision Medicine, University Hospital Brno

Discussion highlights:

The Center's mission is to coordinate and develop research in precision medicine using a multidisciplinary approach with multi-stakeholder committees. The Center has two Molecular Tumour Boards (paediatric patients and adults), utilises liquid biopsy, and developed a tool for the assessment of cancer genome variants of unknown significance. All predictive next-generation sequencing (NGS) tests are fully reimbursed in the Czech Republic, with up to €2,500 coverage per patient for combined DNA/RNA NGS panels. Each patient could be tested one time per year. One in five patients referred to by the Tumour Board at the Center receives molecularly-driven treatment, and 89 % of all cases had the therapy fully reimbursed. Most of the ESMO (European Society for Medical Oncology) guidelines can be followed thanks to the innovative drug access and financial coverage for patients in the Czech Republic. Key research initiatives include the national GENESIS registry to collect and generate solid data from Molecular Tumour Boards for negotiations with insurance companies, the only Outpatient Clinic for Undiagnosed Paediatric Patients in the Czech Republic to increase diagnostic rates, to end their diagnostic odyssey and improve clinical outcomes, and the BabyFox project (sponsored by Illumina) to perform trio whole-genome sequencing in rapid settings in critically ill neonates and paediatric patients from the Paediatric Intensive Care Unit (PICU) and Neonatal Intensive Care Unit (NICU).

Text has been taken from the interview made to Prof. Slaby by ICPerMed. To read the full text click ***HERE***.

6.1.2 IHU PRISM, the first National Centre for Precision Medicine in oncology in France – EP PerMed Best Practice Award Winner



Speaker: Maud Kamal
Speaker's role/title: Executive Director | Institut Hospitalo Universitaire (IHU) PRISM | Gustave Roussy Cancer Campus

Discussion highlights:
IHU PRISM is a precision medicine institute in France dedicated to advancing a multi-disciplinary, trans-tumoral program focused on understanding the biology of each patient's cancer. Its goal is to identify patients with the most aggressive cancers at the time of diagnosis, characterise the biological mechanisms of their disease, and provide tailored treatments from the outset through precise risk assessment. The institute has been awarded a €30 million grant from the French government and the French National Research Agency (ANR) as part of the FRANCE 2030 plan. IHU PRISM has been founded by Gustave Roussy, University Paris-Saclay, Centrale Supélec, Inserm and Unicancer institutes.

Cancers are classified according to the organ in which the tumour appears. The different stages in the development of a cancer – initiation, promotion and progression – are governed by biological mechanisms. There is therefore a growing gap between this way of classifying cancers and advances in precision oncology, which uses molecular profiling of tumour and immune cells to guide therapies. The vision of IHU PRISM is that classifying cancers according to their molecular characteristics would speed up access to effective treatments for millions of people; it is also the 1st step towards precision oncology and a deeper biological understanding of how cancer works.

The ambition of the IHU PRISM is to develop a world-class center of excellence in precision oncology to deliver the vision of the scientific, medical and educational program. IHU PRISM's various programmes will ensure the production of multidimensional portraits of the cancer and the host to guide personalised prevention and treatment.

IHU PRISM has been awarded the title of Best Practice in Personalised Medicine by the EP PerMed.

*Text has been taken from the interview made to Dr. Kamal by ICPerMed. To read the full text click **HERE**.*

6.1.3 Regional Healthcare Information Platform in Halland, Sweden – EP PerMed Best Practice Award Winner

Speaker: Eva Bom
Speaker's role/title: Project Manager at Region Halland, Sweden

Discussion highlights:
Eva presented the data platform that Region Halland has developed to manage health related data and the dashboard for monitoring healthcare that aims at helping healthcare professionals managing different platforms all in one tool was presented. More information available **HERE**.

During the visit, Region Halland was awarded the title of Best Practice in Personalised Medicine by the EP PerMed.

6.2 Day 2 – November 28th 2025

6.2.1 The NICR and Pediatric Precision Oncology Programme

Speaker: Jaroslav Sterba
Speaker's role/title: Scientific Director at the National Institute for Cancer Research (NICR) and Head of the Department of Paediatric Oncology

Discussion highlights:
The National Institute for Cancer Research encompasses 11 institutions and 71 research groups. Recently, 6 new research groups have been established, as well as 2 PhD programmes. Publications produced are rising in number and impact factor. Coverage by media of the programme is good, as well as communication and dissemination activities organised by the programme on cancer and cancer research. It was stressed that this programme actually initiated new collaborations between research groups, improving the ecosystem of cancer research.
The paediatric cancer care core is divided between Prague and Brno, both of them being in the ITCC network. Jaroslav shared his perspective from the field as paediatrician and oncologist. Discussion on therapy protocols followed, with some examples developed by the unit in Brno, especially combination therapies, that were able to increase survival.

6.2.2 The Central European Advanced Therapy and Immunotherapy Centre (CREATIC)

Speaker: Regina Demlova
Speaker's role/title: Director of the Center of Excellence CREATIC

Discussion highlights:
Regina presented the newly established Central European Advanced Therapy and Immunotherapy Centre (CREATIC), part of the Masaryk University. The centre is dedicated to the research, development and GMP production of Advanced Therapy Medicinal Products (ATMPs). The facility is established in the University campus and is currently under total renovation and funded by the EC with a 40 million euros grant. The centre is the result of international collaboration with Fraunhofer Institute, University of Leipzig and University of Copenhagen. The production facility is equipped with state-of-the-art equipment for the GMP production of dendritic cell-based immunotherapy for patients with high-risk malignancies and MSC-based thx for patients with epydermolysis bullosa. Pre-development equipment is also available. CREATIC research division has 3 programmes: rare diseases, immune-oncology and innovations; 7 research groups and 2 to be fully established. An overview of all the research groups followed. The centre also has a data science unit and a knowledge valorisation unit. The centre is an ATMP expert node

for ECRIN-ERIC. To address regulatory and HTA aspects, the centre relies on collaborations with researchers at Masaryk University.

6.2.3 The Tissue engineering Programme at the Faculty of Medicine, Masaryk University

Speaker: Ales Hampl
Speaker's role/title: Head of the Department of Histology and Embryology

Discussion highlights:
The Department includes 9 research groups and 7 of them focus their research on different aspects of tissue engineering. The basic aspects of tissue engineering were introduced. Ales' group focuses on bone engineering especially with the use of ceramic scaffolds. They produce different shapes that can adapt to different uses and environments. Engineering lungs was also presented, as well as new technologies such as 3D printing and bio-printing for tissues.

6.2.4 Visit to the laboratories of the Central European Institute of Technology at Masaryk University Brno (CEITEC MU)

The visit was concluded with a tour of the facilities at the laboratories of the centre.