Porto Declaration on Cancer Research

Porto, 3 May 2021
PORTO DECLARATION ON CANCER RESEARCH

Open to be signed by citizens and institutions as a result of the Cancer Research Summit 2021, Porto, 3rd May 2021

The undersigned call for a collective action throughout Europe towards a comprehensive translational cancer research approach focused on personalized and precision medicine and covering the entire cancer research continuum, from prevention to care. This requires specific actions to strengthen a network of well distributed and interconnected high-quality infrastructures for translational research, clinical and prevention trials and outcomes research to ensure that science-driven and social innovations benefit patients and individuals at risk across the healthcare systems in the European Union (EU).

We consider that such a European-wide deployment of high-quality infrastructures has the potential to achieve in 2030 a 10-year cancer-specific survival for 75% of patients diagnosed in EU member states with a well-developed healthcare system.

This target is critically important because cancer is one of the major health problems affecting our society, a situation that is set to deteriorate globally as the population grows and ages. The yearly burden of cancer is expected to increase in the EU member states from the current 3.5 million to more than 4.3 million by 2035. Over this period, the number of individuals that live with a cancer diagnosis during and after treatment and may require regular screening and specialized care, including rehabilitation and psychological and socio-economic support, will rise even steeper.

We, therefore, consider that the fight against cancer will be more successful if Europe relies on a shared network that acts in concert and hence call on all EU member states to strengthen and further develop their existing national initiatives in the areas of prevention, early detection, diagnosis, treatment and long-term follow-up or support.

Under this context, the Cancer Research Summit 2021, organized by the Portuguese Presidency of the EU in collaboration with the European Commission, focused on key aspects of cancer research that are essential for the successful implementation of the Europe’s Beating Cancer Plan and Europe’s Cancer Mission goals established under the Horizon Europe Program for 2021-27.

The Summit followed the Declaration on effective cancer research “Europe United against Cancer” signed on October 13, 2020, by Germany, Portugal and Slovenia, under the EU Council Presidency Trio in order to guide future directions for research and related links with the health systems throughout Europe.

Reducing the increased cancer burden will require the implementation of concerted actions covering the whole cancer research/care/prevention continuum, spanning from basic and preclinical research through clinical and prevention research to outcomes research. Further,
research must cover all components of cancer therapeutics/care and prevention with active citizen/patient participation in the full translational cycle from research to patient care or disease prevention, ensuring that the patient is at the centre of shared decision-making.

Concerted actions across this continuum that spans from basic and preclinical research through clinical and prevention research to outcomes research, as well as the establishment of high-quality networked infrastructures will pave the way not only to clinical innovation, but also to the mitigation of economic and social inequalities across European countries. This requires strengthening the following network of distributed and interconnected high-quality infrastructures for translational research, clinical research, and outcomes research.

These three infrastructures all cohere and are integrated in well-known infrastructures in Europe – the Comprehensive Cancer Centres (CCCs). These CCCs have the multidisciplinary expertise, capacity and integration of clinical care, research, education, samples, data, trials and core facilities to be the major engine rooms of progress in these three areas of activity. They perform according to international standards set by OECI and German Cancer Aid (for Germany) and EACS intends to expand its Designation of Research Excellence to those with the most leading-edge science. Thus they represent an existing accredited and networked foundation for the aims of the Cancer Mission and Europe’s Beating Cancer Plan.

We urge Member States to use this existing network as a foundation, and commission appropriate consulting expertise to develop new CCCs (10 Members States lack them) and develop networks of care and research around CCCs – to meet the following three infrastructure needs.

1. **Infrastructures for translational research:**

   Translational research bridges basic/preclinical research with clinical and prevention research and builds on inventions and innovations from basic/preclinical research to directly impact therapeutic and prevention research. Complex and advanced infrastructures are required to bridge with healthcare (Comprehensive Cancer Centres).

   Molecular and digital pathology is essential for stratifying patients for systemic treatment with anticancer agents and liquid biopsies are being implemented as a complementary diagnostic/monitoring tool. Infrastructure support is also increasing in complexity for radiation and surgical therapy, imaging and immunotherapy. Identification of relevant early tumor lesions for prevention is a strategic research area. The collection of treatment and biological data combined with biobanking provide infrastructures for bidirectional translational research and computational science.

   Consortia of advanced CCCs linked to basic/preclinical research are needed, and Cancer Core Europe is the first example of such a consortium. With successful proof of principle clinical/prevention trials, translation will continue by means of clinical research to achieve effective healthcare system implementation and reducing the time spanning from scientific discovery to patient benefit.
2. **Infrastructures for clinical and prevention trials:**

‘Proof-of-concept’ studies may serve as a starting point for further clinical and prevention research, with a practice-changing aim, including the assessment of its utility in healthcare or prevention, patients’/individuals ‘at risk, cure/survival and health-related quality of life. Well-developed clinical trial structures, and advanced diagnostic methods such as state-of-the-art molecular pathology, omics technologies, and pharmacology to stratify patients as well as innovative imaging are crucial. CCCs can play a role in this together with clinical research networks. The European Organisation for Research and Treatment of Cancer (EORTC) can facilitate this.

For prevention, infrastructures must include strong epidemiology closely connected to basic research, data acquisition capacity, and advanced computational capabilities, and both the International Agency for Research on Cancer (IARC) and Cancer Prevention Europe can play a prominent role in this, along with many other stakeholders. Again, it will be critical to establish funding mechanisms that stimulate these activities and guarantee sustainability. Funding should include resources for proof-of-concept trials initiated by academic investigators.

3. **Infrastructures for outcomes research:**

Evidence of the effectiveness of therapeutics and prevention strategies is essential for the assessment of clinical utility, cost-effectiveness, accessibility, sustainability and prioritization. Outcomes research in therapeutics addresses questions related to all aspects of the clinical pathway, including treatment optimization, side effects of treatments, long-term follow-up with assessment of health-related quality of life, rehabilitation and survivorship, as well as attention to social and economic aspects. This should preferably be a collaborative effort between clinicians, researchers and epidemiologists. For prevention, outcomes can be measured using data from population-based registries for cancer incidence and mortality.

The European Commission’s new Knowledge Centre on Cancer will also help foster scientific and technical alignment, coordination and support of European actions against cancer. The Knowledge Centre provides the European Cancer Information System, the European Guidelines and Quality Assurance Schemes for Breast, Colorectal and Cervical cancers and European Best Practices on cancer prevention through its Health Promotion and Disease Prevention Knowledge Gateway.

Indeed, it should become standard that all patients within the European Union have access to state-of-the-art cancer prevention, diagnostics, treatment, and aftercare procedures, regardless of where they live. Comprehensive Cancer Centres and CCC-like entities working in networks (or consortia) are ensuring that this happens today in many European regions by developing
treatments tailored to the patients’ individual needs based on the latest scientific findings, put forward by the European Code of Cancer Practice.

By further developing, involving and enlarging CCCs and networks throughout all of Europe it will facilitate access to the infrastructures described above and will provide researchers with access to the required critical mass of patients, multidisciplinary expertise, biological materials, technological resources, data, and collaborative projects. Furthermore, they will bridge research with the healthcare systems.

The seeming inequalities both within and among EU Member States regarding prevention and treatment as well as care and prevention, require more efficient and adaptable funding mechanisms. Synergies amongst regional, national, and European funding mechanisms should therefore be pursued to facilitate access to these important networks of distributed and interconnected high-quality infrastructures.

Coordinated efforts across the European Union are thus required as no country can succeed on its own on the fight to beat cancer. Hence, we endorse the call for European-wide mobilization of well distributed, interconnected high-quality infrastructures for translational research, clinical and prevention trials, and outcomes research ensuring that science-driven and social innovations benefit patients and individuals at risk across the healthcare systems in the European Union.

Porto, 3rd of May 2021

Manuel Heitor, Minister of Science, Technology and Higher Education, Portugal