Porto Declaration on Cancer Research

Porto, 3 May 2021
PORTO DECLARATION ON CANCER RESEARCH

Open for signature by citizens and institutions following the Cancer Research Summit 2021, Porto, 3 May 2021

The undersigned call for collective action throughout Europe towards a comprehensive translational cancer research approach focused on personalised and precision medicine and covering the entire cancer research continuum, from prevention to care. This requires specific actions to strengthen a network of high-quality, well-distributed and interconnected infrastructure 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 infrastructure has the potential to achieve 10-year cancer-specific survival for 75% of patients diagnosed in 2030 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 increases and ages. The yearly burden of cancer is expected to increase in 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 specialised care, including rehabilitation and psychological and socio-economic support, will rise even more steeply.

We therefore believe that the fight against cancer will be more successful if Europe relies on a shared network that acts in concert, and so we are calling 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.

In this context, the Cancer Research Summit 2021, organised by the Portuguese Presidency of the EU in association with the European Commission, is focusing on key aspects of cancer research that are essential for the successful implementation of the goals of Europe’s Beating Cancer Plan and Europe’s Cancer Mission, as established under the Horizon Europe Programme for 2021-27.

The summit follows the “Europe United against Cancer” declaration on effective cancer research, signed on 13 October 2020 by Germany, Portugal and Slovenia under the Trio Presidency of the Council of the EU, in order to guide the future direction of research and how it is linked to the health systems throughout Europe.

Reducing the increased cancer burden will require the implementation of concerted actions encompassing the entire cancer research/care/prevention continuum, extending from basic and preclinical research, as well as clinical and prevention research, to outcomes research.
Furthermore, research must include all components of cancer treatment/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, which goes from basic and preclinical research and clinical and prevention research to outcomes research, as well as the establishment of high-quality networked infrastructure, will pave the way not only towards clinical innovation, but also towards the mitigation of economic and social inequalities across European countries. This requires the strengthening of the ensuing network of high-quality, distributed and interconnected infrastructure for translational research, clinical research and outcomes research.

These three components are all consistent and are integrated into well-known infrastructure in Europe – Comprehensive Cancer Centres (CCCs). These CCCs have the multidisciplinary expertise, capacity and integration of clinical care, research, education, samples, data, trials and core facilities necessary to make them the major engine rooms of progress in these three areas of activity. They operate 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, 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 to commission appropriate consulting expertise to develop new CCCs (10 Members States have none) and develop networks of care and research around CCCs – to meet the following three infrastructure needs.

1. **Infrastructure for translational research:**

   Translational research connects basic/preclinical research to clinical and prevention research and builds on inventions and innovations from basic/preclinical research in order to directly impact treatment and prevention research. Complex and advanced infrastructure is required to connect 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 tumour lesions for prevention is a strategic research area. The collection of treatment and biological data, combined with biobanking, provides infrastructure 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 from the main clinical/prevention trials, translation will continue to achieve effective healthcare system implementation and to reduce the time span from scientific discovery to patient benefit by means of clinical research.
2. **Infrastructure 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 and it can be facilitated by the European Organisation for Research and Treatment of Cancer (EORTC).

For prevention, infrastructure must include sound 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. **Infrastructure for outcomes research:**

Evidence of the effectiveness of treatment and prevention strategies is essential for the assessment of clinical utility, cost-effectiveness, accessibility, sustainability and prioritisation. Outcomes research in therapeutics addresses questions related to all aspects of the clinical pathway, including treatment optimisation, 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 for all patients within the European Union to 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.

Further development, involvement and enlargement of CCCs and networks throughout Europe will facilitate access to the infrastructure 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 connect research to 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 high-quality, distributed and interconnected infrastructure.

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

Porto, 3 May 2021

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