UNITING EUROPE AGAINST CANCER CHALLENGE ACCEPTED

Cancer Leagues' priorities for the EU Cancer Mission

Europe has less than 10% of the world's population but accounts for nearly a quarter of global cancer cases and one-fifth of cancer deaths. In 2018, the estimated number of new cancer cases in Europe was 3.9 million. If recent trends continue, the number could surge to 4.7 million by 2040. In order to provide optimal care to patients, build capacity among healthcare professionals, address health inequalities and limit cancer's impact on the economy, a strong evidence base to underpin policy across the cancer control spectrum is needed.

The EU Cancer Mission offers a once-in-a-generation opportunity for cancer control in Europe. This statement identifies key priorities related to cancer prevention, treatment and patient care, which the Association of European Cancer Leagues consider vital to the success of the Cancer Mission under the Horizon Europe framework.

I. CANCER MISSION: KEY PRINCIPLES

In order to ensure efficient use of public funds and maximise societal benefit, we recommend that the Cancer Mission commit to the following principles:

- **Needs-driven**: R&I investments should be driven by public health and patients' needs, which are defined through a transparent process involving patients and civil society organisations.
- **Cross-sectorial**: Funding should be allocated to a variety of multidisciplinary projects covering all stages of the research pipeline from basic and clinical to epidemiological, translational and implementation research.
- **Efficient & Effective**: Investments should be made in a strategic manner and focus on achievable outcomes within the given timeframe. Proposed collaborative projects should be innovative, open-source and avoid duplication.
- **Equitable**: Funding allocated should be distributed on a fair and impartial basis to the benefit of all Europeans over time. Underfunded areas of cancer and disadvantaged, marginalised and vulnerable populations should be prioritised.
- Accessible, Available & Affordable: R&I should result in health technologies that are
 available in a timely manner to those who need them and at a price that individuals,
 health systems and providers can afford.

II. PREVENTION AND EARLY DETECTION - KEY TO SUSTAINABLE CANCER CONTROL

ECL fully endorses Cancer Prevention Europe's statement⁴ and supports their position that prevention is a vital component of a successful Cancer Mission.

Emerging topics in cancer prevention

- Understanding better the causes of cancer in order to identify the causes
 of common cancers (e.g. prostate and ovarian cancer), greater aetiological
 research considering exposure across the life-course is required.
- Personalised prevention research tumour-specific genomics have led to
 effective targeted therapies. Prevention research must consider not only
 the natural history of cancer but also the people to which it applies. The
 growing evidence around population stratification to identify high-risk
 individuals can be developed further to improve screening and early
 diagnosis.

Fully implementing effective practice

- Applying what we know 40% of cancer cases in the EU can be prevented through practices and actions targeted towards risk prevention at the individual and population levels as outlined in the European Code against Cancer. The Cancer Mission can help scale up and improve effective interventions, such as organised population-based screening for breast, cervical and colorectal cancer, and discourage interventions for which there are no or uncertain benefit.
- Behavioural insights and inequalities in health research is required to
 provide greater clarity on the behavioural drivers underpinning the lifestyle
 patterns and behaviours that increase cancer risk. This research can inform
 better preventative interventions and should be done in concert with work to
 address the socio-economic and commercial determinants of health which
 can exacerbate persistent inequalities in health.

It is important to note that investment in cancer prevention can take decades before demonstrating a strong effect. Consequently, the Cancer Mission should carefully design less direct short and medium-term metrics for success.



III. FROM TREATMENT TO CURE

Allocating more resources to discover new cancer treatments and to improve existing treatments will lead to patients surviving cancers for longer. Cancer patients have access to a range of treatment options including medicines, radiotherapy and surgery. All treatment options must be addressed in future research projects, which could include:

- Discovering new curative treatments this will require a mix of basic research to better understand the biology of cancer, as well as clinical and translational research for all treatment types.
- Increasing research into treatment of cancers with poor prognosis due to the lack of effective treatment, collaborative research efforts into hard-totreat cancers should be encouraged.
- Supporting treatment optimisation research more research is needed to
 identify the optimal dosage and duration of existing treatments, either used
 alone or in combination with others, for the benefit of patients and to
 guarantee the sustainability of healthcare systems. Research must comply
 with the highest standards of practice and integrity and be free of
 commercial interest.
- Enhancing clinical research capacity and collaboration clinical trials are
 the best available standard for changing practice and giving patients access
 to high quality treatments. Innovative trial designs and enhanced
 collaboration should be encouraged, particularly for rare and paediatric
 cancers where adequate sample sizes should be achieved.
- Reducing fragmentation of oncology data sources harness the potential of the vast quantities of data and samples currently fragmented across databases and biobanks by engaging all commercial and non-commercial stakeholders, facilitating data-sharing across research institutes and improving data co-ordination (e.g. pharmacological databases linked to European cancer registries to help identify common off-patent drugs with cancer preventative efficacy; creation of an inventory of global best practice of successful interventions; building on and enhance IARC's work to coordinate cancer registry data).



IV. PATIENT-CENTRED MISSION

More people are surviving cancer than ever before and living with the long-term effects of cancer after treatment. In 2018, 43.8 million people were alive within 5 years of a cancer diagnosis. This is projected to rise due to population growth and ageing. Therefore, focusing on patients and survivors' quality of life should be a key focus of future research projects.

In addition, the majority of medical R&I focuses on product development and market approval, which often neglects patient issues in real-world settings. What matters to patients should be at the centre of publicly funded R&I. Research areas should include:

- Quality of Life (QoL) of patient survivors more research related to longterm side-effects of cancer treatments and enhanced surveillance of secondary cancers is needed.
- Collections of patient data and focus on QoL measures which includes standardisation of datasets to enable interoperability and accurate comparisons of cancer treatments, care and the implementation of best practices.
- Investment in projects encouraging patients to share their data while safeguarding their right to privacy and confidentiality.
- Advancing personalised and precision medicine research co-ordination and greater support are needed to find out how patients and their cancers are different and to identity which patients will benefit from certain treatments.
- Palliative care for adults, adolescents and children to guarantee optimal
 care and treatment across the whole patient pathway, more studies with
 terminally ill patients should be conducted. The benefits of early
 introduction of palliative care plans should be measured.
- Patient empowerment & education in order to maximise the value of medical products, patients should be involved across all stages of medical development as well as the subsequent decision making. The earlier the involvement process starts, the clearer the measurable benefits. Increased efforts and financial support should be given to patient education programmes.



GOOD PRACTICE EXAMPLES

Area of Research / Funding	Principles	Achievements	Project Information
Grand Challenges: Co-ordinating international research efforts to take on cancer's toughest challenges	A mission-focused, multidisciplinary approach, setting challenges and seeking bold, novel solutions and encouraging collaboration across borders	€148m committed thus far to seven projects, bringing together teams from across Europe and beyond	https://bit.ly /1ZxIdyW
Status of implementation and organization of cancer screening in The European Union Member States	Describes the implementation status, protocols and organisation and invitation coverage of breast, cervical and colorectal cancer screening in the EU	Provides international overview of comparable data from EU MS on the status and performance of organised screening programmes	https://www. ncbi.nlm.nih. gov/pubmed /28940326
Health services research	Interdisciplinarity, research domain strongly dependent on the research question	Quality- and guideline development	https://cutt.l y/XwYzFWA https://cutt.l y/qwYzMyu

ABOUT ECL

The Association of European Cancer Leagues (ECL) represents 29 national and regional cancer leagues across 24 countries with a joint vision of a Europe free of cancer. We cover the full patient pathway, from prevention, early diagnosis, treatment and patient support. We bring together some of Europe's largest charitable research funders, with ECL members funding over €600 million of cancer research in 2017/18.

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