

Challenge Cancer Intergroup and MEP Heart Group Joint Statement

Cancer, cardiovascular disease comorbidities and complications: opportunities for action

Cardiovascular disease (CVD)¹ and cancer are the two leading causes of death in the EU. Although separate diseases, cardiovascular disease and cancer share common modifiable and non-modifiable risk factors that predispose people to both diseases. These common risk factors increase the risk of cardiovascular complications during cancer therapy and the risk of cancer in patients with chronic cardiovascular conditions². The ageing and elderly population are particularly susceptible to both cardiovascular disease and cancer^{3,4}. As life expectancy has increased for people with chronic diseases, we are seeing an increasing number of people who have both cardiovascular disease and a cancer diagnosis (estimate range from 20% to 57%)^{5,6}.

The prevalence of cardiovascular disease in cancer patients represents a challenge for successful treatment since cancer and its treatment can increase their risk of cardiac events. Additionally, there is an association between cardiotoxicity and certain cancer treatments⁷. The adverse cardiovascular effects experienced by cancer patients often limit the ability to effectively treat cancer patients and interfere with the delivery of optimal patient care.

There is clear clinical evidence that cancer survivors have an increased medium to long-term risk of cardiovascular disease compared with the general population⁸. Furthermore, cancer patients often share cardiovascular risk factors or suffer from known pre-existing or yet undetected cardiovascular disease, that may limit their survival and further exacerbate the toxic effects of cancer treatments. For certain cancers, such as breast, prostate, endometrial, or bladder cancer, the risk of death is elevated⁹. The impact of COVID-19 on cancer and cardiovascular patients is also exacerbated, multifaceted, and triggered by several factors that are also associated with an increased risk of death^{10,11}.

Cardiovascular toxicity of cancer therapies is a debilitating reality for many patients, severely limiting their quality of life and limiting their overall survival. The detrimental impact of cancer toxicity on cardiovascular health and the high prevalence of cardiovascular comorbidities in cancer patients necessitate not only an enhanced awareness and better understanding of the complexity of the relationship between the two diseases (including collection of robust data on cancer, cardiovascular disease and their intersect), but also call for changes in health care delivery to ensure the availability of and equal access to dedicated interdisciplinary care pathways. This includes, for example, better application of existing guidelines^{12,13}.

Improved availability and equal access to preventive strategies and state-of-the-art treatment modalities will lead to better risk management for both disease areas, improved preventive health and better health outcomes for cancer patients.

Europe's Beating Cancer Plan is an opportunity for the EU to adopt a holistic and patient-centred approach in cancer care by encouraging widespread adoption of existing guidelines to ensure that

patients with pre-existing cardiovascular comorbidities are treated with best practices for their unique care needs. This is of paramount importance to achieve the health goals the EU has set out.

Therefore, the MEP Heart Group and the Challenge Cancer Intergroup call on the European Commission to 1) recognise cardiovascular disease as the most prevalent comorbidity and as a severe and life-threatening complication of effective cancer therapies; 2) make cancer and cardiovascular comorbidities/complications central components of key EU policy and legislative dossiers; 3) prioritise both diseases and their intersect for research funding. Consistent involvement of patients with cardio-oncological conditions is crucial for co-designing relevant research programmes and better coordinated and integrated care. Providing policy solutions that allow all patients timely access to innovative therapies can have a better impact on health-related outcomes and quality of life.

We call on European policy makers to prioritise the following:

Pharmaceutical Strategy for Europe

Ensure that any definition or interpretation of ‘unmet medical need’ reflect the importance of quality of life and any needs arising from cancer and cardiovascular comorbidities.

Advance the agenda of patient reported outcomes and post market surveillance to increase knowledge of, and response to, cardiovascular complications resulting from cancer treatment.

Better access to biomarkers: CVD patients with cancer need to be identified and treated appropriately. Known biomarkers can be deployed to identify susceptibility to cardiovascular toxicity, while new biomarkers can be developed based on the latest data intelligence. Therefore, better access to testing patients for biomarkers is needed to reduce their susceptibility and allow them to be treated more effectively⁷.

Medication reconciliation: currently there is a limited understanding of the interactions of the many different medicines a cancer patient must take. Considering the upcoming legislation, innovation, safety, and efficacy standards should be key elements in addressing the unmet needs of multimorbid patients, with the fundamental goal of improving patient outcomes and ensuring enhanced patient quality of life. Robust investigation of cardiotoxic effects of compounds is needed and the data generated deployed to deliver tailored treatments that avoid toxicities and improve patient outcomes.

Europe’s Beating Cancer Plan

Focus on research and data collection for complications and comorbidities, including cardiovascular complications during cancer treatment and survivorship, in the newly created **Knowledge Centre on Cancer**. Cancer and cardiovascular patients deserve an integrated, data-informed approach along the entire care pathway. The establishment of well-structured, validated protocols for patient assessment, treatment, and monitoring, as well as the development of clinical trials evaluating the use of preventive cardiovascular strategies in patients receiving cancer treatments are key to reinforcing the benefits of a **Knowledge Centre** for cancer patients.

Launch the ‘**Better Life for Cancer Patients Initiative**’ providing a ‘**Cancer Survivor Smart-Card**’. This card must include details of the cancer treatments and pre-existing or new comorbidities, including cardiovascular comorbidities, as well as detailed information on how to prevent potential cardiovascular disease. The cardiovascular community is willing to offer their expertise to the European Commission for the design and implementation of this initiative.

Ensure a high-quality healthcare workforce: we welcome the proposal to launch a multidisciplinary cancer training programme, as a continuous medical education (CME) certification across all medical disciplines. This will markedly expand a multidisciplinary workforce in all EU countries and improve their performance. We would expect the **field of cardio-oncology to be a key component of this programme**¹⁴.

Ensure that **European Reference Networks** address cancer-related complications and comorbidities and involve recognised National Comprehensive Cancer Centres to improve the quality of diagnosis. This would also be an important step in improving cancer and cardiovascular care.

Invest in and further support prevention and early detection strategies: to ensure equitable access to holistic, multidisciplinary, and patient-centred care pathways involving all relevant stakeholders (policy makers, interdisciplinary health care workers, patients, and informal caregivers).

Promote multidisciplinary dialogue: between different stakeholders to agree on concrete next steps to address cancer-related complications and comorbidities, including cardiovascular complications during cancer treatment and survivorship.

Developing synergies with the SAMIRA Action Plan on Medical Ionising Radiation Applications: studies have identified early, and late manifestations of heart disease induced by external radiation, a side effect of diagnostic procedures (x-ray) and external beam radiation therapy to tumours in the chest, when all or part of the heart is within the radiation treatment field. We welcome the risk-balanced approach of the plan and the support to quality and safety of radiation technology in medicine.

Ensure cancer registries are mandated to capture comorbidities: within most cancer registries, information on quality of life, after-care and comorbidities remain very low. In this regard, we welcome the Europe's Beating Cancer Plan commitment to support further development and coordination of cancer registries. A potential expansion of the recommendations developed by ENCR on minimal data sets for collection by cancer registries, which include comorbidities, would facilitate the establishment of protocols for cardiovascular comorbidities.

Leveraging EU funding instruments – Horizon Europe & EU4Health programmes

Support transnational collaborative research on cancer and cardiovascular comorbidities under the **Cancer Mission of Horizon Europe**. The aim is to fill existing gaps in research and establish a more holistic understanding of the impact of these conditions in the affected patient. The EU mission on cancer can provide the needed infrastructure for an appropriate action focussed on the patient and their co-morbidities and not only as a single disease entity. This can be achieved within the framework of the EU's Horizon Europe research programme, running from 2021-2027.

Support joint actions at Member State level **under the EU4Health programme** to create and connect interoperable hospital databases to monitor treatment optimisation and record the unknown burden of cancer and cardiovascular complications. **The European Health Data Space** should welcome and facilitate innovative registries, which address high prevalence diseases more holistically.

¹ Cardiovascular Disease (CVD) is a group of conditions affecting the heart or blood vessels – they prominently include heart attacks and strokes, as well as arrhythmias and congenital heart disease. CVD is closely interlinked with other chronic diseases, such as diabetes or kidney disease, but also vascular dementia which is often caused by heart disease and stroke

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- ¹² The European Society of Cardiology (ESC) published a position paper on cancer therapies and cardiovascular toxicity in 2016 and will issue the first guidelines on cardio-oncology in 2022. Zamorano JL et al., ESC Position Paper on cancer treatments and cardiovascular toxicity. *Eur Heart J.* 2016 Sep 21;37(36):2768-2801. doi: 10.1093/eurheartj/ehw211
- ¹³ European Society of Medical Oncology (ESMO) released in 2020 the Guidelines for the Management of Cardiac Disease in Cancer Patients with Strategies for Prevention, Detection and Treatment of Cardiotoxicity. Curigliano G, et al. ESMO Guidelines Committee. Management of cardiac disease in cancer patients throughout oncological treatment: ESMO consensus recommendations. *Ann Oncol.* 2020 Feb;31(2):171-190.
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