







MELCAYA<sup>III</sup> melcaya.eu Despite huge
advancements in the field, much more research is still
needed to understand
why certain people,
gender and age groups
are at a higher risk of
developing cancer. All
these uncertainties limit
the design of effective
cancer prevention
programmes as well as
healthcare solutions
adapted to each patient.

\_,,

Funded by the European Union

Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Health and Digital Executive Agency (HaDEA). Neither the European Union nor the granting authority can be held responsible for them.



HORIZON-MISS-2021-CANCER-02-03 The **EU Mission on Cancer** has the ambitious goal (in combination with Europe's Beating Cancer Plan) of **improving the lives of more than 2 million people** by 2030 through prevention, cure and, for those affected by cancer (including their families), to live **longer and better.**  The 'Understanding (risk factors & determinants)' cluster consists of five projects that received funding from the European Commission through the Horizon Europe's Mission Cancer programme (HORIZON-MISS-2021-CANCER-02-03).

The Mission Cancer programme aims at better **understanding** the impact of risk factors and **health** determinants on the development and progression of cancer.

<b>GENIAL</b> Understanding gene environment interaction in alcohol-related hepatocellular carcinoma	<b>LUCIA</b> Understanding lung cance related risk factors and their impact	<b>ELMUMY</b> Elucidation of risk factors and health determinants associated with progression of monoclonal gammopathies to multiple myeloma	<b>DISCERN</b> Discovering the causes of three poorly understood cancers in Europe (renal, pancreatic and colorectal)	<b>MELCAYA</b> Novel health care strategies for melanoma in children, adolescents and young adults
The GENIAL consortium brings together partners with unique expertise in clinical hepatology, as well as artificial intelligence to improve diagnosis of ALD-HC. The identification of environmental factors and genetic variations promoting alcohol-related hepatocellular carcinoma (ALD-HCC) will enable the development of targets and associated models enabling early-stage detection of individuals at risk of developing alcohol-related liver cancer thus improving drastically curative options and prognosis for patients.	The consortium's goal is to improve the early detection and management of lung cancer by in depth study of risk factors from exposure to individual biology, in order to improve prevention strategies, provide policy recommendations, help implement screening programs, improve diagnosis and enable precision medicine approaches.	ELMUMY proposes an interdisciplinary approach bringing together clinicians and researchers aiming to integrate epidemiological, clinical and experimental datasets in order to create a molecular model of cellular processes associated with the onset of active MM and response to therapy. The integration of lifestyle, clinical and omics information will provide specific profiles for each patient allowing personalized diagnosis, prevention, and therapeutic approaches.	Discovering the Causes of Three Poorly Understood Cancers in Europe (DISCERN) is a five-year project of the European Commission Cancer Mission to understand the causes of renal, pancreatic, and colorectal cancer in Europe and to help explain the geographical distribution of these cancer types, including their high incidence in central and eastern Europe.	In childhood, adolescence and young adults (CAYA), melanoma is under-studied and non-existing tailored clinical guidelines and standardized approaches lead to a very low diagnostic accuracy. Against this background, the MELCAYA project aims to understand risk factors and determinants of melanoma to improve the prevention, diagnosis and prognosis of melanomas in CAYA.