

Cancer Media News Report

April – May – June 2022 Issue - Edition No. 6

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Policy section

EU News | Official News Release Key note video message by Commissioner Kyriakides to the First Conference on Improving Treatment Outcomes for Cancer Patients in Croatia - 21.4.2022

"Check against delivery" Ministers, Honourable Members of Parliament, Esteemed Guests, Ladies and Gentlemen, Delivering the keynote speech at the very first conference on improving cancer treatment outcomes in Croatia is a real honour. I thank my European Parliament colleague Dr Romana Jerković for bringing us together.

https://ec.europa.eu/commission/presscorner/detail/en/SPEECH_22_2562

Health Webinar on Breastfeeding, HRT & the European Code Against Cancer Webinar on Breastfeeding, HRT & the European Code Against Cancer- 3.5.2022

As part of a series of webinars focusing on the messages of the European Code Against Cancer and to mark the start of European Week Against Cancer, we invite you to tune in live for a 1-hour 15 minutes webinar which will cover: Introduction to the European Code Against Cancer (ECAC). Webinar 25 May 2022 Association of European Cancer Leagues.

<https://euagenda.eu/events/2022/05/25/webinar-on-breastfeeding-hrt-the-european-code-against-cancer>

European Commission - Europa Donna - 5.5.2022

Europa Donna is a stakeholder in the key breast cancer initiatives spearheaded by the European Commission. After being involved in the development of such initiatives, ED is now dedicated to their full implementation. These include the European Commission Initiative on Breast Cancer (ECIBC) and...

<https://www.europadonna.org/public-affairs-and-advocacy/european-commission/>

Commissioner Kyriakides on Europe's Beating Cancer Plan - 12.6.2022

Greek radio station Skai 100.3 reports that on the occasion of European Cancer Week, the Commission published a study on the access of people with a history of cancer to financial products. The study concerns the so-called right to forget in the EU which sets out the next steps and actions in the framework of the Europe's Beating Cancer Plan. According to the study, there is widespread support for a policy at European level that will ensure fair access to products such as life insurance, loans and credits, including awareness-raising and enhanced exchange of knowledge, experience and practices, and regular updating of scientific data. The Commission will soon launch more work to gather additional data and knowledge to encourage the dialogue between national authorities, patients and the financial sector with a view to establishing the first EU Code of Conduct by early 2024. Commissioner Kyriakides stated that quality of life and equal treatment are fundamental rights of every patient. With the beating cancer plan, we are starting work for the first time in the EU to ensure fair access to financial services for more and more persons with a history of cancer, Commissioner Kyriakides noted.

Source:  km-Skai-100.3- EURANET | EVROPI STON SKAI, 2022-06-12 11:46:00, 00:02:26, by NIKOS ANDRITSOS date: Sunday, 12 June 2022

World No Tobacco Day: Statement by Commissioner Stella Kyriakides - 30.5.2022

Every year, the harmful effects of tobacco continue to take their toll on the health of citizens and our societies. The considerable cancer burden associated with tobacco exposure is an unfortunately well-known reality, with lung cancer accounting for around 12% of all new cancer diagnoses in the EU in 2020. It is the fourth most frequently occurring cancer, after prostate, breast, and colorectal cancers. And it is the leading cause of cancer death.

However, there is good news: lung cancer incidence and deaths have recently been decreasing in many Member States, thanks largely to smoking prevention activities and reduced tobacco consumption.

Tobacco harms not only human health. The consumption of tobacco products and the waste it produces also poses a clear threat to our environment. On this year's World No Tobacco Day the message is clear: we must limit the impact of tobacco both on human and planetary health.

[Europe's Beating Cancer Plan](#) presents our vision for how to create a "Tobacco Free Generation" in which less than 5% of the population uses tobacco by 2040 through stronger tobacco control actions. These actions include, among others, an update of the EU recommendations on smoke-free environments, to cover emerging products, such as e-cigarettes and heated tobacco products, as well as expanding the smoke-free environments to outdoor spaces.

We all can bring positive change against tobacco. On this World No Tobacco Day, I call on everyone to take their health into their own hands, and call it quits on tobacco.

https://ec.europa.eu/commission/presscorner/detail/en/statement_22_3363

'Astonishing' - Health Minister reports new cancer therapy has 40% success rate - 10.6.2022

CAR – T (Chimeric Antigen Receptor T-cell) therapy works by genetically engineering an individual's T-cells to recognise and destroy cancer cells. Stephen Donnelly and EU Health Commissioner Stella Kyriakides visited patients at St James's Hospital in Dublin, one of Ireland's eight designated cancer centres for adults, today (Friday June 10).

<https://www.leinsterleader.ie/news/national-news/833711/astonishing-health-minister-reports-new-cancer-therapy-has-40-success-rate.html>

Burden of cancer

A Systematic Review: The Effect of Cancer on the Divorce Rate

This review addresses the studies the impact of cancer on the divorce rate. Results show that cancer is associated with a slightly decreased divorce rate, except for cervical cancer, which seems to be associated with an increased divorce rate. However, most of the included studies have methodologic weaknesses and an increased risk of bias. Further studies are needed. Copyright© 2022 Fugmann, Boeker, Holsteg, Steiner, Prins and Karger.

Fugmann D. et al., Frontiers in Psychology, volume 13, 828656, March 2022

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85127426917&doi=10.3389%2ffpsyg.2022.828656&partnerID=40&md5=cdc2503e7ef99f97a1b198d1b8a5f06c>

Cancer prevention

Nutrition

Mediterranean Diet as a Shield against Male Infertility and Cancer Risk Induced by Environmental Pollutants: A Focus on Flavonoids

The role of environmental pollutants such as heavy metals, polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls, dioxins, pesticides, ultrafine particles, on the body's defense system is well documented. In order to prevent cancer risk, especially in workers occupationally exposed to pollutants and/or populations residing in highly polluted areas, it has been suggested that the Mediterranean diet, characterized by a high intake of fruits and vegetables rich in flavonoids, can in tissues and fluids and/or mitigate pollutants

effects through different mechanisms. This review shows that the impairment of male fertility and gonadal development, as well as cancers of reproductive system, due to pollutants exposure, may be counteracted by flavonoids.

Montano L. et al., International Journal of Molecular Sciences, volume 23, Issue 3, 1568, February 2022

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85123526650&doi=10.3390%2fijms23031568&partnerID=40&md5=cdee58a201f61cdd681d0861bbc1b0d4>

Risk factors

Residential ultraviolet radiation and breast cancer risk in a large prospective cohort

While ultraviolet (UV) radiation may result in an increased incidence of skin cancer, it is also a source of vitamin D, which could be protective for breast cancer risk. Results show no association between living in areas with higher levels of UV radiation and overall breast cancer risk. However this study supports a role for UV exposure in women who did not regularly take vitamin D supplements in the etiology of ER (estrogen receptor) negative breast cancer.

Gregoire A.M.et al., Environment International, volume 159, 107028, January 2022

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85120692679&doi=10.1016%2fj.envint.2021.107028&partnerID=40&md5=a5097f5d10d199680a0253c395d672f4>

Does Opium Consumption Have Shared Impact on Atherosclerotic Cardiovascular Disease and Cancer?

There is accumulating evidence that opium consumption exerts potential carcinogenic effects and increases the risk of developing various types of cancer. This literature review examines the relationship between opium consumption and atherosclerotic cardiovascular disease (ASCVD) as well as various kinds of cancer.

Masoudkabar F.et al., Archives of Iranian Medicine, volume 25, Issue 1, January 2022

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85124184799&doi=10.34172%2fAIM.2022.08&partnerID=40&md5=9868eb17ae30ef79111bda480dabe5ce>

HER2/neu Levels, Premature Termination of Pregnancy and Breast Cancer Risk: A Hospital-Based Study from Lahore, Pakistan

This study shows that "premature termination of pregnancy" is risk factor of breast cancer.

Mansha M. et al., Pakistan Journal of Zoology, volume 54, Issue 1, 31-37, February 2022

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85120063161&doi=10.17582%2fjournal.pjz%2f20200810090832&partnerID=40&md5=eaec38976e83dbd732539dd7415bd746>

Magnetic Fields and Cancer: Epidemiology, Cellular Biology, and Theranostics

Some epidemiological studies. This review, examines the in vivo and in vitro effects of magnetic fields (MFs) on cancer with particular reference to the involvement of reactive oxygen species (ROS). MF application on cancer diagnostic and therapy (theranostic) are also reviewed by describing the use of different magnetic resonance imaging (MRI) applications for the detection of several cancers. Finally, the use of magnetic nanoparticles is described in terms of treatment of cancer by nanomedical applications for the precise delivery of anticancer drugs, nanosurgery by magnetomechanic methods, and selective killing of cancer cells by magnetic hyperthermia. Although scientists do not generally agree that there is a cause-effect relationship between exposure to MF and cancer, MFs might not be the direct cause of cancer but may contribute to produce ROS and generate oxidative stress, which could trigger or enhance the expression of oncogenes.

Maffei M.E. International Journal of Molecular Sciences, volume 23, Issue 3, 1339, February 2022

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85123882561&doi=10.3390%2fijms23031339&partnerID=40&md5=77baf85dae567d0feccc1cb27c7912b1>

Lead (Pb) exposure from outdoor air pollution: a potential risk factor for cervical intraepithelial neoplasia related to HPV genotypes

Human papillomavirus (HPVs) are the major cause of cervical intraepithelial neoplasia (CIN) that remains to be one of the most common women cancers around the world. It seems other risk factors have synergistic effects on cervical cancer occurrence including smoking, dietary pattern, sexual behavior, ethnicity, epigenetics, and environmental hazardous materials. This study examines the potential cancerous role of lead (Pb) as a common toxic environmental pollutant agent on CIN outcomes. The results showed a direct significant association between Pb accumulation and CIN prevalence.

Zhang J. et al., Environmental Science and Pollution Research, volume 29, Issue 18, 26969, April 2022

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85121130194&doi=10.1007%2fs11356-021-17608-x&partnerID=40&md5=65c91de3ec3e5f6ef7592ca508865026>

Urinary Concentrations of Triclosan, Bisphenol A, and Brominated Flame Retardants and the Association of Triclosan with Demographic Characteristics and Body Fatness among Women with Newly Diagnosed Breast Cancer

This study population shows in women with newly diagnosed breast cancer, an association with urinary concentrations of triclosan, an endocrine disrupter compound. Consistent results were found for associations between triclosan levels and fat mass variables. Conclusion: In this study population, women with newly diagnosed breast cancer had triclosan exposure.

Ilozumba M.N. et al., International Journal of Environmental Research and Public Health, volume 19, Issue 8, 4681, April 2022

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85128215870&doi=10.3390%2fijerph19084681&partnerID=40&md5=e2cace7a3464f0388c1dcf23a86a1154>

Treatment, care and therapies

Hyperthermia Treatment as a Promising Anti-Cancer Strategy: Therapeutic Targets, Perspective Mechanisms and Synergistic Combinations in Experimental Approaches

Hyperthermia (HT) is a promising treatment strategy for cancer because of its safety and cost-effectiveness. This review summarizing 115 studies on the anti-cancer effects of HT. shows that HT is an effective inducer of apoptosis. Moreover, the limitations of HT may be overcome using combined therapy with anti-cancer drugs or natural products.

Yi G.Y. et al., Antioxidants, volume 11, Issue 4, 625, April 2022

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85126934602&doi=10.3390%2fantiox11040625&partnerID=40&md5=ae373bf0bae3e322b8422c7b8a7ddf9d>

Microbiome in cancer: Role in carcinogenesis and impact in therapeutic strategies

The involvement of microbes in a range of diseases, including cancer, is well established. The gut microbiota and its metabolites may activate immunological and cellular pathways that initiate a cancer-fighting immune response. Specific epidemiological links between certain bacteria and cancer have recently been grasped at the molecular level. Similarly, advances in next-generation sequencing technology have found causative pathways for both microorganisms within tumors and bacteria. This review tackles the significance of gut microbiota in cancer initiation as well as cancer prevention,. Several bacteria with probiotic qualities may be employed as bio-therapeutic agents to re-establish the microbial population and trigger a strong immune response to remove malignancies, and further study into this should be conducted.

Rahman M.M. et al., Biomedicine and Pharmacotherapy, volume 149, 112898, May 2022

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85127476620&doi=10.1016%2fj.biopha.2022.112898&partnerID=40&md5=cfcb285cfa9387de7b044016e0fd3702>
