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## World Cancer Day: Breast cancer overtakes lung cancer as leading cause of cancer worldwide. IARC showcases key research projects to address breast cancer

**Lyon, France, 4 February 2021** – According to recent global cancer estimates from the International Agency for Research on Cancer (IARC), the global cancer burden increased to 19.3 million new cases and 10.0 million deaths in 2020.<sup>1</sup> Worldwide, one in 5 people develop cancer during their lifetime, and one in 8 men and one in 11 women die from the disease.

Among the most striking developments revealed by the new IARC estimates is that female breast cancer has become the most commonly diagnosed cancer type in the world, with 2.3 million cases diagnosed in 2020, exceeding the number of new cases of lung cancer for the first time. Breast cancer now accounts for 11.7% of all new cancer cases in both sexes.

To mark World Cancer Day 2021 and to stress the importance of action on a disease that has become the most common cause of cancer death in women and the fifth most common cause of cancer death overall, IARC is highlighting two of its key research projects, which provide evidence for reducing the risk of developing breast cancer (primary prevention) and improving survival of women with breast cancer (secondary prevention).

### **Breast cancer incidence and survival**

In 2020, breast cancer made up 11.7% of all new cancer cases globally, followed by lung cancer (11.4%), colorectal cancer (10.0%), prostate cancer (7.3%), and stomach cancer (5.6%).

The highest incidence rates of breast cancer (new cases per population) occurred in women in high-income countries, such as those in North America (~90 new cases per 100 000 women) and Europe. Incidence rates were substantially lower, but are increasing, in many low- and middle-income countries.

With timely diagnosis and appropriate treatment, breast cancer generally has a very good prognosis. The number of women who are alive today and who were diagnosed with breast cancer within the past 5 years is estimated to be almost 8 million, higher than the number of cancer survivors for any other cancer type. However, breast cancer survival is not uniformly high around the world.

There are substantial disparities in survival between more-developed and less-developed countries, as well as between different social groups within countries. These disparities are due in part to reduced access to early diagnosis and timely completion of treatment.

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<sup>1</sup> Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, Znaor A, Soerjomataram I, Bray F (2020). Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: <https://gco.iarc.fr/today>, accessed 1 February 2021.

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### **The ABC-DO study**

In sub-Saharan Africa, breast cancer is the first or second most common cause of cancer death in women in most countries. IARC is coordinating a research project called the African Breast Cancer - Disparities in Outcomes ([ABC-DO](#)) study, with partners in five African countries. The ABC-DO study is investigating to what extent breast cancer survival differs between women and between countries, and why these variations occur.

In a new video, IARC postdoctoral scientists Dr Milena Foerster and Dr Pauline Boucheron describe the ABC-DO study design and what the research team hopes to achieve.

“The ABC-DO study started in 2014 and has recruited more than 2000 women newly diagnosed with breast cancer in five sub-Saharan African countries,” says Dr Foerster. “These women are followed up from diagnosis using mobile health technology, with a phone call once every 3 months, to collect data on their entire breast cancer journey, from their first symptom to diagnosis, treatment, and, unfortunately, often to death.”

The study examines the extent of low breast cancer survival in the region. It is identifying the most effective strategies to improve survival by studying factors that affect breast cancer outcomes for patients at public hospitals in different settings in sub-Saharan Africa.

“We hope that the ABC-DO study will help to inform strategies to raise breast cancer awareness, to promote early diagnosis, and to improve access to and completion of breast cancer treatment in sub-Saharan Africa,” says Dr Boucheron. “We also hope that this study will raise awareness about the devastating social dimension of breast cancer deaths in sub-Saharan Africa, the children and other family members left behind, and the accompanying cycle of poverty.”

Findings from the ABC-DO study, including the most recent results related to social impact and maternal orphans, are available on the study website, <https://abc-do.iarc.fr/>.

### **Physical activity, diet, and breast cancer – the EPIC study**

Many factors can have an impact on breast cancer risk, including sociocultural contexts and the environment. Breast cancer is also associated with reproductive, dietary, and hormonal risk factors, and an individual's lifestyle can increase or decrease their risk of developing breast cancer. Lifestyles typical of industrialized countries, for example postponement of childbearing and having fewer children, as well as greater levels of excess body weight and physical inactivity, increase the risk of developing breast cancer.

IARC coordinates the European Prospective Investigation into Cancer and Nutrition ([EPIC](#)). EPIC is one of the largest cohort studies in the world, with more than half a million participants recruited in 10 European countries. Some participants have been followed up for more than 25 years. EPIC was designed to investigate the relationships between different lifestyle and environmental factors and the incidence of cancer.

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By 2016, more than 16 700 EPIC participants had been diagnosed with breast cancer, and this number is projected to have increased to more than 27 000 cases of breast cancer by 2020. The large number of incident cancer cases with prospectively collected lifestyle data and blood specimens will enable EPIC researchers to address state-of-the-art hypotheses about the etiology and prevention of breast cancer and other common and rarer cancer types.

In a new video, IARC postdoctoral scientist Dr Elom Aglago presents a summary of the current recommendations relating to physical activity and cancer risk, much of which is supported by or was discovered in the EPIC study. Dr Aglago will speak this evening, 4 February 2021, about the benefits of physical activity in reducing the risk of developing cancer, in a joint webinar to be held by IARC and the Centre Léon Bérard, Lyon, France. “The scientific evidence suggests that being more physically active reduces the risk of developing breast, colorectal, and endometrial cancers,” says Dr Aglago.

### **Note to Editors**

IARC’s online GLOBOCAN 2020 database provides estimates for 2020 of incidence and mortality in 185 countries for 36 types of cancer and for all cancer sites combined, by sex and age group. The database is accessible as part of the [IARC Global Cancer Observatory](#).

### **For more information, please contact**

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