

Largest worldwide study on cancer survival rates reveals dramatic differences – Germany among the leading countries worldwide

In a study called CONCORD-2, around 500 international scientists report on 5-year survival rates for about 25.7 million adult cancer patients suffering from one of the ten most common types of cancer (stomach, colon, rectum, liver, lung, breast, cervix, ovaries, prostate, leukemia) as well as for approximately 75,000 children who were diagnosed with acute lymphoblastic leukemia (ALL) between 1995 and 2009. In the study, the scientists drew on data from 279 cancer registries in 67 countries. It was analyzed using a method called period analysis, developed by Hermann Brenner from the German Cancer Research Center (DKFZ) in Heidelberg. This method delivers more up-to-date data on long-term survival than the rates obtained by conventional methods. The study was published in the journal “Lancet”.

The scientists noted major differences in survival rates in various countries for specific cancer types. This also held true after taking into account regional differences in life expectancy due to other factors such as the age, gender or race of subjects in the study. Above all, they identified remarkable variations in 5-year survival rates for children with acute lymphoblastic leukemia: Rates ranged from 16-50% in countries such as Jordan, Lesotho, Tunisia, Indonesia, and Mongolia to over 90% in Canada, Austria, Belgium, Germany and Norway. In their report the scientists state that this shows large deficits in the management of a disease for which in fact there are effective treatments. ALL is the most common type of cancer in children.

“Germany has become one of the countries with the highest survival rates for other types of cancer as well,” Brenner says. “For example, five-year survival for bowel cancer victims has risen to well over 60%, up from approximately 50% in the 1990s. But the figures for this type of cancer could even be better if more people took advantage of cancer screening programs.” Survival rates have also significantly improved for liver cancer, from 6.5% in the 1990s to 14.4% today, as well as for lung cancer, for which survival rates have risen from 11.6% to 16.2%.

Nevertheless, of the 10 cancer types considered in the current study, cancers of the liver and lung still have the poorest prognosis worldwide, with 5-year-survival rates below 20% both in developing countries and industrial nations. These types of cancer frequently go undetected until they have reached an advanced stage in which effective treatment is often no longer possible. Although survival rates have also improved by up to 10% in countries such as China, Israel, Japan and Korea, they remain below 10% even in the United Kingdom and some other parts of Europe.

The current analysis also shows that 5-year survival for breast and bowel cancers has improved in most industrial countries and in South America. The researchers attribute this to earlier diagnosis and improved strategies for treatment. For patients diagnosed with colon cancer, the highest survival rates are found in Israel and Ecuador (68%); Qatar, Cyprus and Iceland for rectal cancer (70%); and Australia, Brazil, Canada, Cyprus, Israel, Japan, the U.S.A. and a number of European countries for breast cancer (85% and more). Among European countries, Iceland has the highest survival rates for colon and rectal cancer patients; France and Finland have the best results for breast cancer (87%). Russia has the poorest survival rates in Europe for all three cancer types. In Germany, 85% of all women with breast

cancer survive the disease for more than five years. By contrast, only 64% of women affected by cervical cancer survived the 5-year mark during the time period under investigation.

Five-year survival rates for stomach cancer patients were highest in Japan and Korea (54 and 58%, respectively), while survival rates in Europe are often below 20%. According to the scientists, this is due to earlier diagnosis and more radical surgical methods that are common in these countries.

Figures for Germany:

The study evaluated data from 36,511,217 people, corresponding to 43.89% of the population. From this sample, 1,367,345 individuals were diagnosed with one of the 10 cancer types under investigation in the time period from 1995 to 2009.

The following list indicates five-year survival rates from 1995-1999 / 2004-2005 (in terms of percentages):

Breast: 81.2 / 85.3
Cervix: 64.7 / 64.9
Ovaries: 37.7 / 39.7
Prostate: 77.1 / 91.2
Leukemia: 42.9 / 53.6
Lung: 11.6 / 16.2
Liver: 6.5 / 14.4
Rectum: 51.9 / 62.1
Colon: 48.7 / 64.6
Stomach: 22.8 / 31.6

Acute lymphoblastic leukemia (children under 14 years of age): 86.7 / 91.8

The German Cancer Research Center (Deutsches Krebsforschungszentrum, DKFZ) with its more than 3,000 employees is the largest biomedical research institute in Germany. At DKFZ, more than 1,000 scientists investigate how cancer develops, identify cancer risk factors and endeavor to find new strategies to prevent people from getting cancer. They develop novel approaches to make tumor diagnosis more precise and treatment of cancer patients more successful. The staff of the Cancer Information Service (KID) offers information about the widespread disease of cancer for patients, their families, and the general public. Jointly with Heidelberg University Hospital, DKFZ has established the National Center for Tumor Diseases (NCT) Heidelberg, where promising approaches from cancer research are translated into the clinic. In the German Consortium for Translational Cancer Research (DKTK), one of six German Centers for Health Research, DKFZ maintains translational centers at seven university partnering sites. Combining excellent university hospitals with high-profile research at a Helmholtz Center is an important contribution to improving the chances of cancer patients. DKFZ is a member of the Helmholtz Association of National Research Centers, with ninety percent of its funding coming from the German Federal Ministry of Education and Research and the remaining ten percent from the State of Baden-Württemberg.

Contact:

Dr. Stefanie Seltmann
Head of Press and Public Relations
German Cancer Research Center
Im Neuenheimer Feld 280
D-69120 Heidelberg
T: +49 6221 42 2854
F: +49 6221 42 2968
presse@dkfz.de

Dr. Sibylle Kohlstädt
Press and Public Relations
German Cancer Research Center
Im Neuenheimer Feld 280
D-69120 Heidelberg
T: +49 6221 42 2843
F: +49 6221 42 2968

Email: presse@dkfz.de