

The advantage of women in cancer survival: an analysis of EURO CARE-4 data.

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We analysed 1.6 million population-based EURO CARE-4 cancer cases (26 cancer sites, excluding sex-specific sites, and breast) from 23 countries to investigate the role of sex in cancer survival according to age at diagnosis, site, and European region. For 15 sites (salivary glands, head and neck, oesophagus, stomach, colon and rectum, pancreas, lung, pleura, bone, melanoma of skin, kidney, brain, thyroid, Hodgkin disease and non-Hodgkin's lymphoma) age- and region-adjusted relative survival was significantly higher in women than men. By multivariable analysis, women had significantly lower relative excess risk (RER) of death for the sites listed above plus multiple myeloma. Women significantly had higher RER of death for biliary tract, bladder and leukaemia. For all cancers combined women had a significant 5% lower RER of death. Age at diagnosis was the main determinant of the women's advantage, which, however, decreased with increasing age, becoming negligible in the elderly, suggesting that sex hormone patterns may have a role in women's superior ability to cope with cancer.