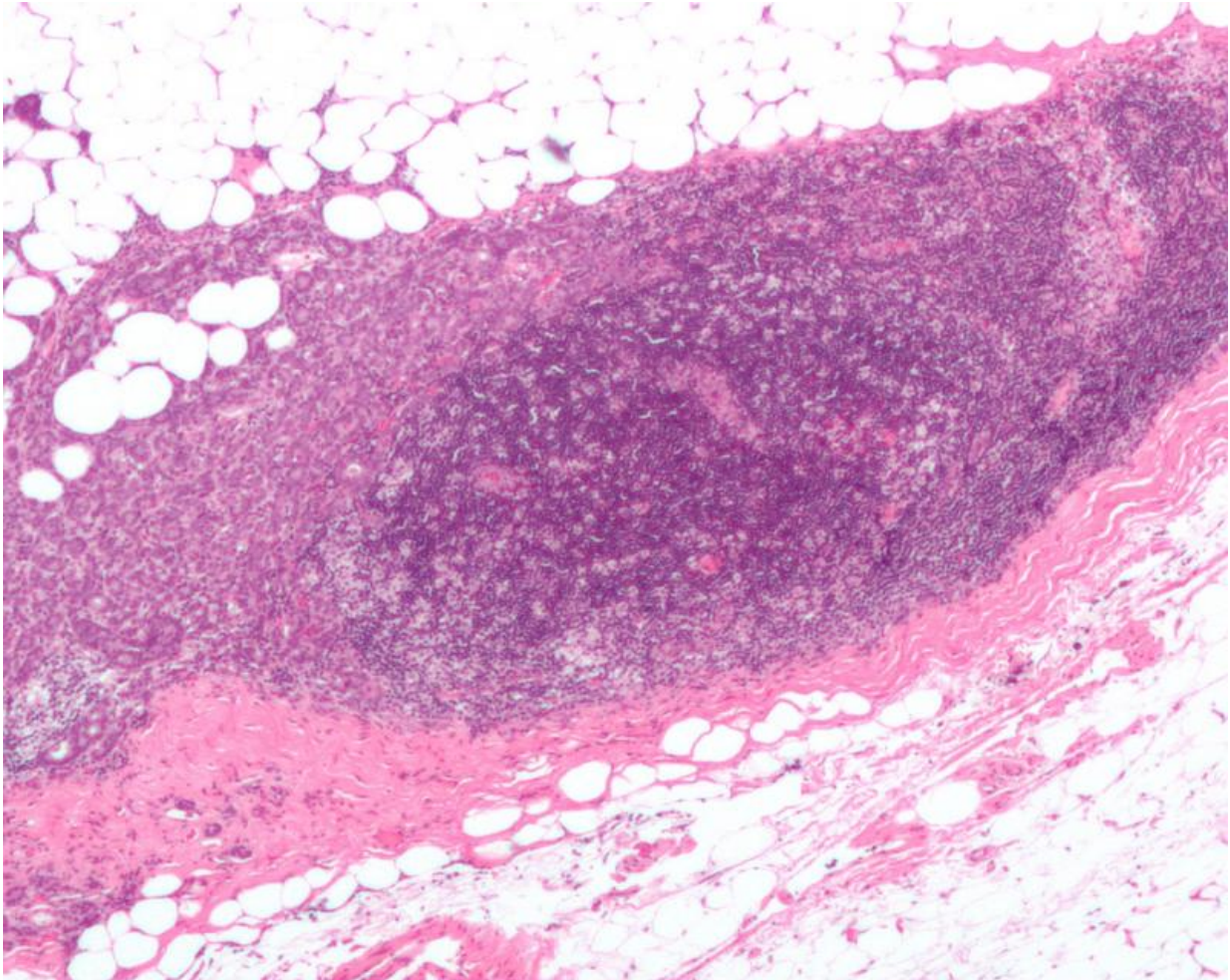


# Does ethnicity affect breast cancer biology?

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Micrograph showing a lymph node invaded by ductal breast carcinoma, with extension of the tumour beyond the lymph node. Credit: Nephron/Wikipedia

Although breast cancer is somewhat more aggressive in South Asian and

Black women than in White women, this is largely due to age differences between ethnic groups in the UK, according to new research.

Dr Toral Gathani, a clinical epidemiologist at the University of Oxford, told the 10th European Breast Cancer Conference (EBCC-10) today (Thursday) that findings from the largest study to date of tumour characteristics in relation to ethnicity suggested that inherent differences in tumour biology between the ethnic groups were unlikely to play a role.

She and her colleagues from the Cancer Epidemiology Unit analysed data from over 68,000 [women](#) with [breast cancer](#) registered in England between 2006-2013 - 66,192 in White women, 1,233 in South Asian women and 641 in Black women. The data included information on the [age](#) of diagnosis, region of residence, deprivation, ethnicity, tumour size, grade, oestrogen receptor status (ER), Herceptin receptor status (HER2), and whether or not the cancer had spread to the lymph nodes.

She reported that the average age at diagnosis was five years lower in both South Asian women and Black women (55 years) than in White women (60 years). Although South Asian and Black women were more likely to have biologically aggressive tumours, such as higher-grade tumours and more lymph node involvement, little difference remained between the [ethnic groups](#) after adjustment for factors that could affect the findings, particularly age.

Dr Gathani said: "Much of the apparent excess of aggressive breast tumours in South Asian and Black women is simply because they are younger than White women.

"Black and South Asian women are known to be slightly less likely to develop breast cancer than White women. Although their cancers are diagnosed at younger ages, this is largely because these ethnic minority populations as a whole are younger than the population of White women

in the UK. Breast cancer is more aggressive in younger than older women, and this largely explained why more aggressive tumour features were seen in ethnic minorities," she said.

Socioeconomic factors had little effect on the differences observed. However, the researchers found that breast tumours were still slightly larger in ethnic minority than White women, even after adjustment for age and other potential confounding factors.

Dr Gathani said: "This may be due to delays in diagnosis, such as not having been screened or prolonged duration of symptoms before women seek medical attention." These factors were not investigated in this study.

"Ethnic minority women should be encouraged to be breast aware, to attend regular screening at the appropriate ages and to see their doctors if they have concerns," she concluded.

Chair of EBCC10, Professor Fatima Cardoso, who is Director of the Breast Unit at the Champalimaud Clinical Centre, Lisbon, Portugal, said: "This study suggests that the worse prognosis seen in [breast cancer patients](#) from [ethnic minority](#) groups in the UK can be at least in part explained by the younger age of this group. However, previous data show that age by itself may not be determinant of prognosis but rather the fact that breast cancer in younger ages is associated with features of worse prognosis. Therefore, further research is needed to clearly understand the role of age and ethnicity in [breast cancer prognosis](#)."

Provided by ECCO-the European CanCer Organisation

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