

## Racial Disparities in Breast Cancer



New findings published in *Cancer Epidemiology Biomarkers & Prevent* show significant differences in the accuracy of diagnostic mammograms across racial and ethnic groups, with variation observed in several measures of diagnostic performance.

Several studies have already established that racial disparities exist in breast cancer. Multiple socioeconomic and biological factors have been identified as potential causes for these disparities. While some aspects of breast cancer screening have been studied to identify the variation in breast cancer diagnosis, little attention has been paid to differences related to the diagnostic mammography process.

In most cases, women are referred for diagnostic mammograms if screening mammography has detected potential signs of breast cancer, as this is the first step to being properly diagnosed and treated. It is safe to assume that variations might exist at this step to affect later outcomes in breast cancer patients.

In this study, researchers analysed 267,868 diagnostic mammograms from 98 facilities in the Breast Cancer Surveillance Consortium and identified mammograms that were reported to be malignant or benign. 70% of the mammograms studied were non-Hispanic white women; 13% non-Hispanic were Black; 10% were Asian/Pacific Islander, and 7% were Hispanic.

Findings show that the invasive cancer detection rate was highest among non-Hispanic whites, followed by Asian/Pacific Islanders, non-Hispanic Black and Hispanic. The positive predictive value was highest among non-Hispanic white, followed by Asian/Pacific Islanders, non-Hispanic Black and Hispanics.

The most likely group to receive a false-positive report were Asian/Pacific Islander women, with false-positive rates per 1,000 mammograms of 169.2 for Asian/Pacific Islanders, 136.1 for Hispanics, 133.7 for Blacks, and 126.5 for whites.

Non-Hispanic Black women were most likely to receive a false-negative report with false-negative rates per 1,000 mammograms of 4.6 for Blacks, 4.0 for whites, 3.3 for Asian/Pacific Islanders, and 2.6 for Hispanics.

Non-Hispanic Black women were the most likely to receive short-interval follow-up recommendations, with 31% of women recommended for further imaging within six months. By comparison, 22.1% of white women, 16.1% of Asian/Pacific Islander women, and 23.6% of Hispanic women received the same recommendation.

There were even differences in the tumours detected through the diagnostic mammograms. Asian/Pacific Islander women had the largest proportion of ductal carcinoma in situ, while Black women were more likely to be diagnosed with later-stage tumours and higher tumour grades. Black women were also more likely to be diagnosed with the aggressive triple-negative breast cancer subtype.

These findings highlight the need to better study the role of the diagnostic facility in women's breast cancer treatment and the importance of including women from all backgrounds in clinical studies to better understand the population-level risks and benefits of mammography.

Source: [American Association for Cancer Research](#)

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