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## Screening Mammography and Breast Cancer: Debunking Misconceptions and Highlighting Benefits



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The 2023 draft recommendation by the U.S. Preventive Services Task Force (USPSTF) to start screening mammography at age 40 has sparked controversy, with a Perspective article in the New England Journal of Medicine by Woloshin et al. challenging its merits. A [recent article published in the Journal of Breast Imaging](#) seeks to address the concerns raised by Woloshin et al and provide evidence supporting the screening mammography recommendation for women starting at age 40.

### Importance of Screening Mammography

Screening mammography for women aged 40 and above is backed by robust evidence from randomised controlled trials, service screening results, and recent Cancer Intervention and Surveillance Modelling Network (CISNET) estimates. According to CISNET modelling, annual screening from ages 40 to 79 can avert 4.8 to 5.3 more breast cancer deaths per 1000 women compared to biennial screening from ages 50 to 74 previously recommended by USPSTF. Importantly, this screening is particularly beneficial for Black women, averting 35% more breast cancer deaths than the average across all races.

### Addressing Concerns About Breast Cancer Mortality

Woloshin et al question whether there is new evidence indicating an increase in breast cancer mortality. Contrary to their assertion, there is no evidence of increasing breast cancer mortality rates. Screening mammography has played a pivotal role in the declining breast cancer mortality rates since 1990, alongside advancements in treatment. Tabár and colleagues' study spanning nearly six decades demonstrates the substantial benefit of screening mammography, with women aged 40 to 69 experiencing significantly lower breast cancer mortality rates.

### The Impact of Unscheduled Screening

Woloshin et al overlook the detrimental impact of irregular screening on breast cancer mortality rates. Data reveals that since 2010, breast cancer mortality rates have stagnated for women under 40, despite having access to the same treatment options as older women. Furthermore, the rate of distant-stage breast cancers has escalated in younger women, indicating the critical role of screening mammography in early detection and reducing late-stage breast cancers.

### Efficacy of Mammography in Women Aged 40 to 49

The authors' assertion that there is a lack of new randomised controlled trials (RCTs) specific to women in their 40s is misleading. Meta-analyses of RCTs have consistently demonstrated a significant mortality reduction from screening mammography in women aged 40 to 49. Excluding data from the discredited Canadian National Breast Screening Study (CNBSS-1), meta-analyses reveal mortality reductions of 24% to 29% in this age group.

### Role of CISNET Modelling

Woloshin et al express reservations about USPSTF's reliance on CISNET modelling. However, CISNET modelling has been a consistent tool used by USPSTF and has provided valuable insights into the benefits of screening mammography. Contrary to the authors' claims, CISNET modelling underscores the substantial benefits of lowering the starting age for screening to 40, a strategy endorsed by the American College of Radiology, the Society of Breast Imaging, and the National Comprehensive Cancer Network.

### Minimising the Benefits of Screening

Woloshin et al attempt to downplay the benefits of screening mammography by focusing on all-cause mortality. However, the primary aim of screening is to reduce breast cancer mortality, which it accomplishes effectively. Analysis indicates that women undergoing regular annual mammography have reduced all-cause mortality and a significantly lower risk of dying from breast cancer.

The recent draft recommendation by USPSTF to initiate screening mammography at age 40 is supported by substantial evidence from RCTs, service screening results, and CISNET modelling. While concerns raised by Woloshin et al warrant consideration, they fail to undermine the overwhelming evidence supporting screening mammography for women aged 40 and above. Screening mammography plays a pivotal role in early detection, reducing breast cancer mortality rates, and addressing racial disparities in breast cancer outcomes. Therefore, it is imperative to prioritise evidence-based recommendations and encourage regular screening mammography for women starting at age 40 to improve breast cancer outcomes and save lives.

**Source:** [Journal of Breast Imaging](#)

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