

The USPSTF Recommendations Are Not Scientifically Based - Underestimate the Benefit of Mammography and Admit That Lives Will Be Lost Unnecessarily

- [Daniel B. Kopans](#), Expert in Mammography Screening

Harvard Medical School/Massachusetts General Hospital

The US Preventive Services Task Force (USPSTF) acknowledges that mammography screening, beginning at the age of 40, significantly decreases breast cancer deaths. Their guidelines, however, ignore the science and direct measurements of benefit to limit access to screening.

1. None of the parameters of screening change abruptly at the age of 50 or any other age (1). The age of 50 is an arbitrary threshold. 2. The USPSTF correctly used the randomized, controlled trials (RCT) as scientific proof of benefit. However, since the RCT did not stratify by risk, there is no proof that screening based on risk will save lives, and no scientific support for recommending screening based on risk (2). Screening only women at high risk will miss the 75-90% of breast cancers that occur in women who are not at high risk. 3. The USPSTF chose the lowest possible reduction in breast cancer deaths (15%), unaware of the fact that the RCT underestimate benefit. Women allocated to be screened who refuse the invitation, and die of breast cancer, are still counted as having been screened (non-compliance). Women allocated to be controls whose lives are saved by mammograms that they obtain outside the trial, are still counted as unscreened controls (contamination). 4. The USPSTF recognizes a 30 % decrease in breast cancer deaths in the U.S. since 1990 but ignore it, and ignore the 40% decrease in breast cancer deaths reported in Sweden (3), predominantly due to screening, that applies to women in their forties. 5 Ignoring direct data they used a 15% reduction in deaths and estimated 1300 women needed to be screened (NTS) to save one life was a reasonable number to support recommending mammography. They would deny screening to women ages 40-49 because they estimated their NTS was 1900. In reality there is 30-40% decrease in deaths for women in their forties so, using their formula, the NTS is 950-705 for women in their forties putting them well below the threshold. 6 Most false positive mammograms are easily resolved with a few extra pictures. Most biopsies are needle biopsies. Over treatment is not the fault of mammography and should be addressed to the oncologists. 7. The Task Force admits that lives will be lost by increasing the time between screens to two years.

Before denying women access to screening, anyone advising women needs to be aware of the facts.

References

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3. Swedish Organised Service Screening Evaluation Group. Reduction in breast cancer mortality from organized service screening with mammography: 1. Further confirmation with extended data. *Cancer Epidemiol Biomarkers Prev.* 2006;15:45-51.