



Biennial vs annual mammography: How I manage my patients

📌 If a patient aged 50 and older asks to be screened every 2 years, I would support her choice, provided she is not at elevated risk for breast cancer

Controversy surrounds the issue of mammographic screening intervals for older women, with conflicting recommendations from professional organizations and governmental bodies. For example, the US Preventive Services Task Force recommends biennial screening for women aged 50 to 74 years,¹ whereas the American College of Obstetricians and Gynecologists² and the American Cancer Society³ both recommend annual screening for women aged 40 years and older, with no upper age limit. It also has been unclear how patient comorbidities affect screening.

Recently, Braithwaite and colleagues addressed both issues in a prospective trial of 3,000 women with breast cancer and 138,000 women without breast cancer—all of them aged 66 to 89 years.⁴

What did they find?

Details of the trial. This study was conducted between January 1999

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and December 2006. Using logistic-regression analyses, the study authors calculated the odds of advanced tumors and the 10-year cumulative probability of false-positive findings by the frequency of screening (1 vs 2 years), age, and comorbidity score, as determined using the Klabunde approximation of the Charlson score.¹

All women underwent mammography at a facility that participated in data linkage between the Breast Cancer Surveillance Consortium and Medicare claims.

Screening interval had no effect on odds of advanced tumors.

The study authors found no difference in the rate of advanced breast cancer (adverse characteristics included stage IIb or higher, tumor size greater than 20 mm, or positive lymph nodes) when screening was biennial versus annual, and no effect of comorbidities on this percentage.⁴

Annual screening led to more false-positives.

In fact, Braithwaite and colleagues found that 48% of women aged 66 to 74 years had at least one false-positive screen in the annual-screening group (95% confidence interval [CI], 46.1–49.9), compared with 29% of biennial screeners (95% CI, 28.1–29.9).¹

Balance of data seems to tilt toward biennial screening

In this study, Braithwaite and colleagues observe that their findings are consistent with those of earlier studies indicating that biennial screening retains the benefits of annual assessment and reduces the false-positive rate.

Guiding my patients. Although I expect most of my patients aged 50 and older to continue to seek annual mammograms for the foreseeable future, I plan to be flexible about mammography intervals, given these findings. Therefore, if a patient aged 50 years or older is receptive to being screened less often than annually, I would encourage her to be screened every 2 years, provided she is not at elevated risk of breast cancer by virtue of family or personal history, genetic testing, or earlier findings. 📌

References

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