

Response to: “[Yaffe’s] Response to: ‘Beyond the mammography debate: a moderate perspective’”

The Editor

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In his response to Constantine Kaniklidis and to my colleague Dr. Steven Narod, Martin Yaffe¹ makes two assertions about the Canadian National Breast Screening Study (CNBSS), one of which we have previously responded to²; the other, however, is new.

To take the new assertion, Yaffe states: “[It] seems to have been dangerous to be assigned to the mammography arm of CNBSS1, especially in the prevalence screening round, in which women were 46% more likely to die of breast cancer.”

The possibility that the process associated with screening by mammography is dangerous has been raised before, with some explanation of a biologic basis for the apparent role of mammography in bringing forward the date of death from breast cancer³. However, before accepting that possibility, it has to be considered whether the data cited by Yaffe from our 25-year follow-up report⁴ support his assertion at all.

Yaffe notes that the differences he cites are not statistically significant; in fact, one was. The reason the data were cited is that many clinicians feel that a benefit from screening because of the earlier detection of prevalent cancers cannot be expected; others might feel that such an assertion is unwarranted if mammography has a lead time of about 4 years. Be that as it may, if differential detection is allowed (by comparing the effects of applying two screening tests with very different sensitivities for small cancers), you pad the total of the prevalent cancers in the mammography arm compared with the smaller number of cancers in the control arm. It is therefore not surprising to find that, with prolonged follow-up, more deaths from prevalent cancers occur in the mammography arm than in the control arm. Even so, comparing outcomes for post-prevalent cancers still shows no benefit from screening mammography. Thus, we are entitled to conclude that Yaffe’s new assertion is a red herring.

To revert to the old assertion, Yaffe claims that there was a serious problem with the randomization in the CNBSS. He cites the fact that 17 of the 19 poor-prognosis cancers detected in the prevalence round in the mammography arm of the CNBSS 1 were palpable, and that only 5 such

cancers appeared in the control arm. However, the fact that an abnormality might have been detected on physical examination of the breasts does not necessarily mean that the *cancer* was palpable. As we have pointed out elsewhere⁵, women in the CNBSS were more likely to be referred to a specialist centre for diagnosis and treatment when no abnormality or an indefinite abnormality was found on physical breast examination but an abnormality was found on mammography, than when an abnormality was palpable. Compared with the general hospitals, where surgeons were comfortable operating on palpable lesions, but where (in an era before sentinel node biopsy became common) axillary dissection and pathologic examination were often less extensive, the specialist centres were more likely to do a complete axillary node dissection with adequate subsequent pathologic examination. As a result, patients with breast cancer in the mammography arm were more likely to be found to be node-positive, when comparable patients in the control arm were being regarded as node-negative.

It is ironic that Yaffe, a critical member of the CNBSS team, still chooses to reject its findings on specious grounds, even though the CNBSS is the only breast screening trial to have demonstrated perfect balance achieved by its randomization in terms of breast cancer risk factors.

We have produced strong evidence that mammography screening does not reduce breast cancer mortality. It is time that the world faces up to this, casts preconceived notions aside, and concentrates on the early diagnosis of breast cancer achievable by breast awareness and prompt diagnosis, together with effective treatment.

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CONFLICT OF INTEREST DISCLOSURES

I have read and understood *Current Oncology*’s policy on disclosing conflicts of interest, and I declare that I have none.

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