## Clinical practice guidelines for the care and treatment of breast cancer: adjuvant systemic therapy for nodenegative breast cancer (summary of the 2001 update)

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his article provides a summary of changes made by the Steering Committee on Clinical Practice Guidelines for the Care and Treatment of Breast Cancer to the article "Clinical practice guidelines for the care and treatment of breast cancer: 7. Adjuvant systemic therapy for women with node-negative breast cancer" originally published in 1998¹ (the 2001 update can be found online at www.cma.ca/cmaj/vol-164/issue-2/breastcpg/guideline 7rev.htm). Although there are not many changes to this guideline, new studies have provided even more evidence that supports the original recommendations.

The Early Breast Cancer Trialists' Collaborative Group has published further analyses of its data.<sup>2,3</sup> This recent meta-analysis has included greater numbers of women with breast cancer and a longer follow-up than the 1990 analysis. In the earlier analysis involving over 4900 women with node-negative breast cancer who received chemotherapy, the relative risk reduction in the risk of recurrence had been 26% and the relative reduction in mortality 18%. In the recent analysis, these figures were 34% and 18% respectively among women under 50 years of age, and 28% and 23% respectively among those 50-69 years old. Similarly, in the 1990 analysis involving over 12 000 women with nodenegative disease who had received tamoxifen, the relative reduction in the risk of recurrence had been 25% and the relative reduction in mortality 17%. In the recent analysis these figures were 49% and 25% respectively among women with node-negative estrogen-receptor-positive disease who had received 5 years of tamoxifen.

The steering committee's original guideline had recommended the use of either Adriamycin plus cyclophosphamide (AC) chemotherapy or cyclophosphamide, methotrexate and fluorouracil (CMF) chemotherapy in women with high-risk, node-negative breast cancer on the basis of extrapolated results from clinical trials involving women with node-positive disease. The updated guideline contains information from a recent large trial by the National Surgical Adjuvant Breast and Bowel Project (NSABP) in which these 2 chemotherapy regimens were compared in women with node-negative breast cancer that was estrogen-receptor negative. The survival rate at 5 years was about 90% in both treatment groups.

Previously it was unclear whether there was a role for tamoxifen in the treatment of estrogen-receptor-negative breast cancer. The new NSABP trial also compared tamoxifen plus chemotherapy with chemotherapy alone.<sup>4</sup> The

survival rate at 5 years (about 90%) did not differ between the 2 groups. This finding indicates that there is no role for tamoxifen in the treatment of such cases.

The original guideline recommended adjuvant systemic therapy in women with node-negative breast cancer at high risk of recurrence. Chemotherapy was recommended for all premenopausal women (less than 50 years of age) and for postmenopausal women (50 years of age or older) with tumours that were estrogen-receptor negative. Tamoxifen was recommended for postmenopausal women whose tumours were estrogen-receptor positive. For this last group it was suggested that patients might benefit further by the addition of chemotherapy.

By and large, the updated guideline makes the same recommendations concerning systemic therapy in women with node-negative breast cancer at high risk for recurrence. However, for postmenopausal women with estrogen-receptor-positive disease, the addition of chemotherapy to tamoxifen therapy is recommended, but the increase in chemotherapy-related toxicity must be considered. Finally, whether the use of tamoxifen should be recommended in premenopausal women with estrogen-receptor-positive breast cancer following chemotherapy is unclear.

The patient version of these guidelines has also been updated and can be found online at www.cma.ca/cmaj/vol-164/issue-2/breastcpg/guideline7revpt.htm.

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Competing interests: None declared.

## References

- Steering Committee on Clinical Practice Guidelines for the Care and Treatment of Breast Cancer. Clinical practice guidelines for the care and treatment of breast cancer: 7. Adjuvant systemic therapy for women with node-negative breast cancer. CMAJ 1998;158(3 Suppl):S43-51.
- Early Breast Cancer Trialists' Collaborative Group. Polychemotherapy for early breast cancer: an overview of the randomised trials [review]. Lancet 1998;352:930-42.
- Early Breast Cancer Trialists' Collaborative Group. Tamoxifen for early breast cancer: an overview of the randomised trials [review]. Lancet 1998;351:1451-67.
- Fisher B, Anderson S, Wolmark N, Tan-Chiu E. Chemotherapy with or without tamoxifen for patients with ER negative breast cancer and negative nodes: results from NSABP B23 [abstract]. Proc Am Soc Clin Oncol 2000;19:72a.

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