

AN INDIVIDUAL REFERENCE LIMIT (IRL), FOR PREDICTING DISTANT METASTASES IN ASYMPTOMATIC WOMEN FOLLOWING A DIAGNOSIS OF PRIMARY BREAST CANCER

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Purpose: The purpose of this study was to evaluate the combined measurement of serum CEA, TPA, and CA 15-3, using an individual reference limit (IRL), for predicting distant metastases in asymptomatic women following a diagnosis of primary breast cancer.

Methods: A total of 231 patients were followed up for a mean of 5.5±1.6 years. An IRL for defining critical changes (CCs) in marker levels was used as a warning signal of pending distant metastases.

Results: Sensitivity, specificity, and accuracy of the combined CEA-TPA-CA 15-3 marker panel for predicting patient outcome were 95.2%, 97.8%, and 97.9%, respectively. In all, 19 (8.3%) patients relapsed with a mean lead time to radiological evidence of metastases of 11.7±13.8 months.

Conclusion: We concluded that the combined measurement of CA 15-3, CEA, and TPA using an IRL for determining the CC in markers levels is an accurate strategy for predicting outcome during postoperative monitoring of asymptomatic breast cancer patients. Whether the early prediction of metastasis and subsequent administration of therapy impacts on patient outcome should now be the objective of a prospective clinical trial. The marker panel described here could serve as the basis for such a trial.

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