Letter to the Editor

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Elevated Serum Tumour Markers and Systemic Disease

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Dear Sir,

Recently, an excellent comparative study of pre-operative levels of breast carcinoma antigen (CA 15-3) and mucin-like carcinoma-associated antigen (MCA) in patients with breast cancer was published by Gozdz et al. [1] in Tumor Biology.

In an overview on tumour markers in patients with breast cancer, we also came to the conclusion that CA 15-3 and MCA are not additive but only competitive [2]. However, in the discussion, Gozdz et al. [1] concluded: 'Thus, only high CA 15-3 or MCA concentrations were a useful adjunct in staging, implying systemic disease'. Everybody would be happy if this could be proven. We submit that it is not proven by these authors; they only extrapolate high levels in meta-static disease (stage IV) to elevated levels in lower stages. In a prospective study that was performed blind in relation to the tumour markers carcino-embryonic antigen, tissue polypeptide antigen, CA 15-3 and MCA (the surgeons did not receive the tumour marker results), we were able to follow 89 patients with Stage I or II who did not receive adjuvant hormonal or combined chemotherapy. In this series, 3 patients had elevated levels of CA 15-3 and MCA (using the same cutoff, i.e. 40 U/ml for CA 15-3 and 17 U/ml for MCA), 1 patient had an elevated level of only CA 15-3 and 1 patient of only MCA. Out of this total of 5 patients, there was a clear misstaging of 1 patient who had bone metastases according to bone scintigraphy that was proven to be correct within 1 month by X-ray studies. In 4 patients the levels of CA 15-3 and MCA dropped post-operatively to normal levels. Only 1 patient developed metastases after 21 months. The other 3 are still disease-free 18-26 months post-operatively. On the other hand, 12 out of the 89 patients developed metastases within a period of 6-23 months having pre-operative normal levels of CA 15-3 and MCA. It would have been very useful to perform such an analysis also in stage III patients but this is more difficult because most of them having received adjuvant hormonal or combined chemotherapy.

In our opinion, these results indicate that pre-operative elevated levels of the aforementioned markers may be associated with systemic disease (1 patient) but is not always the case (4 patients). It shows also that pre-operative elevated levels of these markers have no meaning in prognosis because in

Elevated Serum Tumour Markers and Systemic Disease

331

12 patients metastatic disease developed while normal levels were present at the time of the primary operation.

van Dalen A: Tumour markers in breast cancer. Ann Chir Gynaecol 1989;78:54-64.

References

Gózdź SS, Kowalska MM, Sluszniaik JT, et al: Pre-treatment concentrations of breast carcinoma antigen (CA 15.3) and mucin-like carcinoma-associated antigen in patients with carcinoma of the breast. *Tumor Biol* 1989;10:103–108.