EVALUATION OF PROSTATE SPECIFIC ANTIGEN AS A PROGNOSTIC AND PREDICTIVE INDICATOR FOR BREAST CANCER PATIENTS


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A variety of factors have been reported to have prognostic and/or predictive significance in patients with primary breast cancer. Prostate Specific Antigen (PSA) is a valuable biological marker for the management of patients with prostate cancer. In this study, using an ultra-sensitivity time-resolved immunofluorometric assay, we investigated the association between presence of PSA immunoreactivity, relapse-free, overall survival and response to adjuvant therapy in 174 consecutive female breast cancer patients with a median follow-up of 33 months (range 7-67). PSA immunoreactivity higher than 0.03 ng/ml was detected in 27% of the patients (47/174). The risk for cancer relapse was significantly lower in patients with PSA positive tumors than in patients with PSA negative tumors (p=0.02). A similar hazard ratio for overall survival was also observed. Multivariate analysis demonstrated that compared to PSA(-) patients, PSA (+) patients still have substantially lower risk for relapse after adjusting for other clinicopathologic variables studied (p=0.03). We further analyzed the association between PSA status and cancer relapse or death in 98 patients who had received adjuvant treatment (Chemotherapy and/or Tamoxifen). PSA (+) patients were less likely to relapse or die than PSA (-) patients (19% vs 38% and 12% vs 25%). This is the first study demonstrating the value of PSA as a new favorable marker in breast cancer.