

#2924 Prognostic value of PSA in breast cancer: A large U.S. cohort study. Yu, H., Levesque, M.A., Clark, G.M., and Diamandis, E.P. *Mount Sinai Hospital, Toronto, Ontario, Canada M5G 1X5, University of Texas Health Science Center at San Antonio, San Antonio, TX 78284-7884*

Prostate-specific (PSA) is a valuable tumor marker for the diagnosis and management of prostate cancer, but has recently been shown to be produced by various extraprostatic tissues, including normal and cancerous female breast tissue. In an attempt to confirm our previous observation that PSA was a favorable prognostic indicator for breast cancer prognosis, we conducted a cohort study using a more sensitive ELISA for PSA measurement (detection limit=0.001 ng/mL) in extracts of primary breast tumors from 953 patients followed up for a median of 73 months. Survival analysis showed that the relative risks (RR) for relapse and death were both significantly lower in PSA-positive patients (who had PSA levels exceeding the 30th percentile) than in PSA-negative patients (RR=0.67, p=0.01 for relapse and RR=0.72, p=0.05 for death) and that the reduced risks remained statistically significant in multivariate analysis adjusted for patient age, nodal status, steroid hormone receptor status, S-phase fraction, and DNA ploidy (RR=0.68, p=0.02 for relapse and RR=0.65, p=0.02 for death). We thus confirmed that PSA presence in tumor extracts is an indicator of favorable prognostic outcome in female breast cancer patients.