

#1359 Pepsinogen C, an independent favorable prognostic factor in node-positive breast cancer patients. Scorilas, A., Diamandis, E.P., Levesque, M.A., Diamandi, A., Khosravi, M.J., Giai, M., Ponzone, R., Roagna, R., Sismondi, P., Lopez-Otin, C. *Mount Sinai Hospital, Toronto, ON, Canada, University of Turin, Turin, Italy and University of Oviedo, Oviedo, Spain.*

The objective of this study was to evaluate the prognostic value of pepsinogen C (PepC) in breast cancer patients. PepC is an aspartic proteinase involved in the digestion of proteins in the stomach and is also synthesized by a subset of human breast tumors. PepC concentration was measured with a highly sensitive immunofluorometric assay (Clin. Chem. 1997; 43:1365-1371) in breast tumor cytosols from 151 patients (median follow-up, 67 months) stratified according to nodal status. First, an optimal cutoff value (1.75 ng/mg of total protein of the extract) was defined by statistical analysis. PepC values were then compared with other established prognostic factors, in terms of disease-free survival (DFS) and overall survival (OS). High PepC status was found more frequently in small ($P = 0.003$) and well-differentiated tumors ($P = 0.042$) as well as in stage I ($P = 0.003$) and node negative patients ($P = 0.040$). No significant associations of PepC concentration with age and steroid receptor status were observed. In univariate analysis, negative PepC status proved to be a significant predictor of reduced disease-free ($P = 0.0086$) and overall survival ($P = 0.025$). Cox multivariate analysis in subgroups of patients as defined by nodal status indicated that PepC status was a strong factor to predict the DFS ($P = 0.0039$) and the strongest factor to predict the OS ($P = 0.0046$) in node-positive but not in node-negative patients. In