

P011 P-cadherin and E-cadherin-expressing breast carcinomas are associated with cytoplasmic p120-catenin and poor patient survival

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Changes in junctional catenin expression may compromise cadherin-mediated adhesion, increasing cell malignant properties such as invasive and metastatic abilities. In fact, altered expression of α -, β -, γ - and p120-catenin was reported as associated with E-cadherin loss or decreased expression, either in breast carcinomas or in breast cancer cell lines.

We investigated p120- and β -catenin subcellular localization in a series of human invasive breast carcinomas, and correlated it with clinicopathological parameters. We demonstrated that both catenins frequently display a reduced membranous or cytoplasmic staining pattern. These alterations were significantly correlated with lack of E-cadherin and estrogen receptor- α expression. Regarding β -catenin, it was possible to associate its cytoplasmic expression with higher histological grade/tumour size and nodal status, suggesting a relevant role as a prognostic factor. Interestingly, we found that the majority of E- and P-cadherin co-expressing tumours exhibited cytoplasmic p120-catenin, being these breast carcinomas the ones with poor patient survival. Thus, p120-catenin cytoplasmic accumulation may play an important role in mediating the tumourigenic effects derived from P-cadherin aberrant expression, particularly in tumours maintaining E-cadherin expression.