The prognostic significance of epidermal growth factor receptor expression in squamous cell carcinomas of the oesophagus

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EGFR expression in 150 potentially curative resected squamous cell carcinomas of the oesophagus was analyzed immunohistochemically and correlated with survival. Altogether, 124 of 150 (82.7%) tumours expressed different levels of EGFR. The percentage of tumour cells expressing EGFR varied greatly between the different tumours (median: 70%). 62 (50.0%) tumours showed weak and intense staining, respectively. Regarding the staining pattern 19 (15.3%) tumours showed exclusively membraneous immunoreactivity, 27 (21.8%) an exclusively cytoplasmic immunoreactivity and 78 (62.9%) a mixed staining pattern. No significant correlation however could be found between EGFR expression and various clinicopathologic parameters such as pT category, pN category, tumour size, histologic grade and blood vessel invasion. In univariate survival analysis, no correlation between EGFR expression and postoperative survival time was observed. In a forward multivariate Cox regression analysis only the parameters lymphatic-vessel invasion (p = 0.001), pT category (p = 0.0034) and pN category (p = 0.0256), but not the EGFR expression, could be verified as independent prognostic variables. In conclusion, the evaluation of the EGFR expression does not provide prognostic information for patients who underwent potentially curative resection for SCC of the oesophagus.