## PCP4/PEP19 and HER2 Are Novel Prognostic Markers in Mucoepidermoid Carcinoma of the Salivary Gland

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Mucoepidermoid carcinoma (MEC) is one of the most common malignant salivary gland carcinomas, but no effective treatment strategy has been established other than surgical resection. Purkinje cell protein (PCP) 4/peptide (PEP) 19 is a calmodulin-binding antiapoptotic peptide that is expressed and inhibits apoptosis in human breast cancer cells. Human epidermal growth factor receptor 2 (HER2) is an epidermal growth factor that has been implicated in the pathogenesis of many carcinomas, particularly breast and gastric carcinomas. In the present study, we performed immunohistochemical analyses of samples from 73 patients who underwent surgical resection for MEC of the salivary gland using antibodies against PCP4/PEP19 and HER2. PCP4/PEP19 expression was related to better prognosis, while HER2 expression was associated with worse prognosis. Patients that were PCP4/PEP19-positive and HER2-negative showed similar outcomes to PCP4/PEP19 and HER2 alone. Therefore, PCP4/PEP19 and HER2 are predicted to play important roles in the pathogenesis and progression of MEC.