

# **Role of Twist in head and neck carcinoma with lymph node metastasis**

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摘要

## **Abstract**

The transcription factor Twist protein has been found to be correlated with metastasis in various carcinomas, including hepatocellular, breast and prostate carcinomas. However, the role of Twist in head and neck squamous cell carcinomas (HNSCC) remains unknown. Head and neck cancer tissue microarrays (TMAs) of tumors from 50 patients with HNSCC were examined. Immunohistochemical (IHC) stain analysis showed that, out of the 50 patients, twenty (40%) showed Twist-positive staining in the tumor cells, and Twist expression was positively associated with differentiation status ( $p=0.027$ ), lymph node metastasis ( $p=0.032$ ) and disease progression ( $p=0.029$ ). Further analysis revealed that the expression of Twist was positively correlated with CXCR4 (Spearman,  $r=0.408$ ,  $p=0.003$ ) and CCR7 ( $r=0.417$ ,  $p=0.003$ ). FindPatterns analysis suggested that the transcription factor Twist, as a basic helix-loop-helix (bHLH) protein, might regulate CXCR4 and CCR7 expression in squamous cell carcinomas, which in turn might be associated with lymph node metastasis