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Clinicopathological Significance of Aberrant Expression of IER5 Protein in Alimentary Tract Cancers

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ABSTRACT This study investigates the expression and clinical relevance of the immediate early response 5 (IER5) protein in various gastrointestinal cancers, including esophageal squamous cell carcinoma, gastric adenocarcinoma, colorectal adenocarcinoma and hepatocellular carcinoma. Western blot and immunohistochemistry analyses were conducted to compare the IER5 protein levels in tumour tissues with adjacent normal tissues. The results indicate that IER5 protein expression is significantly higher in tumour tissues across all the examined cancer types, and the increase in cytoplasmic IER5 expression in these cancers suggests its potential involvement in tumorigenesis. However, this study's clinicopathological analysis did not find a correlation between IER5 expression and patients' age, sex, clinical stage and lymph node metastasis status in all the examined cancer types, as well as HBsAg positivity and cirrhosis in HCC. In conclusion, IER5 is overexpressed in gastrointestinal tumour tissues and could be a promising marker and target for cancer diagnosis and treatment.