

BP OP 3-1**Suggestion of a new nomogram including inflammatory markers for predicting invasive carcinoma in intraductal papillary mucinous neoplasm (IPMN) of the pancreas**

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Introduction : Recent studies have reported that inflammatory markers, such as neutrophil-to-lymphocyte ratio (NLR), platelet-to-lymphocyte ratio (PLR) and advanced lung cancer inflammation index (ALI), are associated with invasiveness of intraductal papillary mucinous neoplasm (IPMN). This study aimed to develop a new nomogram for predicting invasiveness of IPMN including the inflammatory markers and validation of the nomogram using external cohort.

Methods : From 1995 to 2016, a total of 365 patients who underwent surgical resection with IPMN at Samsung Medical Center, Seoul National University Boramae Medical Center, Ilsan Paik Hospital, and Dongguk University Ilsan Hospital were analyzed retrospectively to develop nomogram. For external validation of nomogram, data of 384 patients at Seoul National University Hospital were used. Discrimination ability of nomogram was evaluated using calculating the area under the receiver operating curve (AUC).

Results : After analysis, high body mass index (BMI), pre-operative serum bilirubin level, CA19-9, NLR, PLR, ALI, main duct type, presence of solid portion and tumor size were identified as risk factors of invasive IPMN. The nomogram was developed including aforementioned factors (Fig 1). After external validation, the value of AUC was calculated 0.649 (95% CI 0.578-0.720, $p < 0.001$).

Conclusions : Up to now, we think this study is the first report to predict and validate externally invasiveness in IPMN including inflammatory markers. This nomogram would be useful for identifying patients with risk of malignancy and selecting patients for surgical resection. Further research is needed to strengthen the predictability of the model.

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