

## LV OP 4-1

### Development and validation of novel scoring system for the prediction of disease recurrence following resection of colorectal liver metastasis

**Wan-Joon KIM**, Tae-Wan LIM, Sang-Hee KANG, Pyoung-Jae PARK, Sae-Byeol CHOI, Sun-Il LEE, Byung-Wook MIN, Wan-Bae KIM\*

*Division of Hepatobiliary Pancreas Surgery, Department of Surgery, Korea University Guro Hospital, Korea*

*Division of Colorectal Surgery, Department of Surgery, Korea University Guro Hospital, Korea*

*Division of Transplantation Vascular Surgery, Department of Surgery, Korea University Guro Hospital, Korea*

**Introduction** : The aim of this study was to identify predictive factors for the recurrence of colorectal cancer liver metastasis(CRLM) and then to develop a corresponding novel scoring system that should improve the sensitivity of predicting recurrence in patients with CRLM.

**Methods** : A total of 295 consecutive CRLM patients were enrolled in our institution between January 2002 and December 2015. Multivariate analyses were performed to identify the variables associated with disease recurrence and established the novel scoring system based on it.

**Results** : The scoring system considered seven variables: synchronosity, CA19-9 level, number of liver metastasis, largest size of liver metastasis, resection margin of hepatic lesion, neutrophil-to-lymphocyte ratio and prognostic nutritional index. The area under the curve of ROC was 0.824 (95% confidence interval 0.767–0.882); the sensitivity of our scoring system was 87.9%, specificity was 66.7%, positive predictive value was 20.6%, and negative predictive value was 20.9%

**Conclusions** : For patients with CRLM undergoing curative hepatic resection, our novel scoring system would improve the sensitivity for prediction of disease recurrence in Case of CRLM patients.

Corresponding Author. : **Wan-Bae KIM** ( aoss@korea.ac.kr )