

English Abstract Session

📅 Fri. Nov 14, 2025 8:30 AM - 9:20 AM JST | Thu. Nov 13, 2025 11:30 PM - 12:20 AM UTC 🏠 Room 10

[E1] English Abstract Session 1 Surgical outcome

Moderator: Kazuhiko Yoshimatsu (Department of Digestive Surgery, Kawasaki Medical School), James Ngu (Department of Surgery, Changi General Hospital, Singapore)

[E1-3] A Predictive Nomogram for Retrieving 12 Lymph Nodes in Rectal Cancer Patients

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Objective

This study aims to develop a nomogram model to predict the probability of retrieving 12 LNs postoperatively in rectal cancer (RC) patients.

Methods

Patients collected from Shanxi Cancer Hospital between 2015 and 2020 were retrospectively analyzed. Continuous variables were converted into categorical variables. Chi-square tests were used to identify key factors influencing 12 LNs detected. Significant variables were incorporated into a nomogram model. The model's discrimination ability was evaluated based on the receiver operating characteristic (ROC) curve, while model calibration was assessed using calibration plots. The clinical utility of the model was determined using decision curve analysis (DCA).

Results

A total of 2,724 RC patients were included, 1,906 cases were assigned to the training dataset, while 818 were assigned to the in-validation dataset. Chi-square analysis identified age, T stage, N stage, tumor size, CEA, CA19-9, hemoglobin, and PLT as significant factors associated with 12 LN retrieval. The nomogram indicated that T stage, N stage, and tumor size contributed most significantly. The AUCs of the model were 0.669 for the training and 0.689 for the in-validation dataset. The calibration plots showed good agreement between the predicted probabilities and actual outcomes. The DCA curves demonstrated a favorable net benefit across a wide range of threshold probabilities.

Conclusion

The nomogram model can effectively predict 12 LNs retrieving in RC patients. It also provides a valuable tool for preoperative risk stratification and personalized clinical decision-making.