

diameter ≥ 50 mm ($p=0.01$) and pTNM III stage ($p<0.001$) were independent risk factors. After PSM, the five-year OS rate of patients with IaC in the LAG was higher than that in the OG (51.1% vs. 32.4%, $p=0.042$). The independent preoperative risk factors for IaC include male (OR 1.82, $p=0.046$) and BMI ≥ 25 (OR 1.88, $p=0.021$). Among patients with IaC, the prognostic nutritional index (PNI) in OG group was similar to that in LAG group before operation ($p=0.220$), but lower than that in LAG group on the 1st, 3rd, and 5th day after surgery ($p<0.05$).

Conclusions: Compared to OG, LAG can improve the prognosis of patients with postoperative IaC. For high-risk patients with IaC, LAG is recommended.

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143P Lymph nodes metastasis is the most important factor associated with pattern of recurrence following curative resection of gastric adenocarcinoma

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Background: Lymph node status is among the most important predictors of recurrence after curative gastrectomy. However, the impact of lymph node status on recurrence patterns remains unclear. We aimed to analyse recurrence patterns in completely resected gastric cancer (GC) with negative (pN0) or positive (pN+) lymph nodes.

Methods: We retrospectively assessed 1694 patients who underwent curative gastrectomy from January 2010 to August 2014. Patients were divided into pN0 ($n=655$) and pN+ ($n=1039$) cohorts. Timing and site(s) of recurrence were examined.

Results: Of all, 517 (30.5%) patients developed recurrent disease, and complete data on recurrence could be obtained in 493 patients. For the pN0 cohort, the patterns of recurrence were different according to pT stage: locoregional recurrence was the most common in patients with pT1-2 disease (57.1%), distant was the most common in patients with pT3 disease (57.1%), and peritoneal was the most common in patients with pT4a disease (66.7%). For the pN+ cohort, distant metastasis was the most common pattern irrespective of pT stage. The site-specific trend of recurrence showed that locoregional recurrence increased within 5 years in patients with pN0-2 disease but plateaued 3 years after surgery in patients with pN3 disease. Time to recurrence was significantly longer for the pN0 cohort compared with the pN+ cohort (median: 25 vs 16 months = 0.001). Moreover, post-recurrence survival was significantly better for the pN0 cohort than for the pN+ cohort (median: 12 vs 6 months < 0.001), especially in patients with non-peritoneal recurrence, late recurrence, single recurrence, and receipt of potential curative treatment.

Conclusions: There was a significant difference in recurrence patterns survival between node-negative and node-positive patients. For node-negative patients, follow-up strategies should be considered according to pathologic T stage, while the key to follow-up for node-positive patients is distant metastasis.

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144P Clinical implication of DNA damage response gene in patients with stage II or III gastric cancer

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Background: This study was conducted to evaluate the relation of DNA damage repair (DDR) to clinical outcomes in gastric cancer patients with stage II or III treated gastrectomy.

Methods: From January 2005 to December 2017, 217 patients with stage II or III gastric cancer were analyzed for disease free survival (DFS) and overall survival according to DDR gene status. Immunohistochemical assessment of MLH1, MSH2, ARID1A, PARP-1, BRCA1 and ATM was performed in biologic samples.

Results: Among the 217 patients, the most commonly mutated DDR gene was MSH2 ($n = 208$, 95.9%), followed by BRCA1 ($n = 191$, 88.0%), MLH1 ($n = 184$, 84.8%), ARID1A ($n = 170$, 78.3%), ATM ($n = 146$, 67.3%) and PARP-1 ($n=120$, 55.3%). The high expression levels of PARP-1 group had a significantly longer 5-year OS rate as compared to low expression level of PARP-1 group (62.7% vs. 48.1%, HR 0.649, 95% CI 0.433-0.974, $P = 0.035$). In the multivariate OS analysis, TNM stage (HR = 5.202, $P < 0.001$), high expression PARP-1 (HR = 0.583, $P = 0.011$) and adjuvant chemotherapy (HR = 0.382, $P < 0.001$) were only significantly prognostic factor.

Conclusions: A subgroup of patients with gastric cancer may benefit from targeted therapy. High PARP-1 expression may be a good prognostic factor for gastric cancer particularly, stage II or III gastric cancer post-surgery.

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145P A nomogram for predicting the benefit of adjuvant chemotherapy after resection in patients with Borrmann type IV gastric cancer

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Background: This study sought to explore prognostic factors for patients with Borrmann type IV gastric cancer and to establish a predictive model for survival benefit of postoperative adjuvant chemotherapy in such patients.

Methods: This study reviewed the clinical data of patients who underwent curative surgery at Fujian Medical University Union Hospital from 2006 to 2014 for Borrmann type IV gastric cancer using a prospective database. Cox regression analyses were performed to identify prognostic factors that formed the basis for a nomogram and risk groups. Establishment of risk groups to identify patients with Borrmann type IV gastric cancer who would benefit from adjuvant chemotherapy.

Results: 265 patients who underwent R0 resection were included in this study. Multivariate analysis showed that BMI, tumour differentiation, pT stage, pN stage, and ASA score were independent prognostic factors. Patients in the ACT-group had longer OS than patients in the SA-group, although the p-value for this difference was marginally above the threshold for statistical significance (23.8% vs. 10.9%, $p=0.057$). Stratified analysis showed that there was no significant difference in OS between the ACT-group and the SA-group for each AJCC stage (stage II: 40.6% vs. 29.8%, $p=0.44$; stage III: 21.4% vs. 9.7%, $p=0.056$). A nomogram was established based on these independent risk factors, and nomogram scores were used to divide all patients into a high-risk group (score > 16), an intermediate-risk group ($8 \leq \text{score} \leq 16$) and a low-risk group (score ≤ 8). Further stratified analysis based on AJCC stage showed that the 3-year survival rate was higher in the adjuvant chemotherapy group than in the surgery alone group for low- and intermediate-risk patients in each AJCC stage, while high-risk patients in stage III did not significantly differ.

Conclusions: The nomogram that we established may effectively be used to identify patients with Borrmann type IV gastric cancer who would benefit from postoperative adjuvant chemotherapy. Postoperative adjuvant chemotherapy can improve survival in low- and intermediate-risk patients.

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146P Red cell distribution width and mean corpuscular volume ratio as a promising new marker for chemotherapy effects in remnant gastric cancer: An analysis of a multi-institutional database

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Background: To study the value of the ratio of the red blood cell distribution width (RDW) to the mean corpuscular volume (MCV) (RMR) in predicting the efficacy of adjuvant chemotherapy (AC) in residual gastric cancer (RGC).

Methods: A total of 379 patients who underwent resection for RGC at 7 hospitals in China from January 2004 to January 2016 were analyzed. A nomogram predicts survival was established to evaluate the effect of RMR through a decision curve.