Conclusion:
The biology of tumors may be different in elderly patients, leading to a TGF-ß expression between group A and group B cancers tissue (p = 0.003). But no significant difference was observed in the proportion of patients with TGF-ß and/or CD-44 expression (p = 0.045). The median survival rate of patients without TGF-ß and/or CD-44 expression was significantly lower (7 months) than that of patients with positive expression (15.4 months) (p = 0.005). The median survival rate of patients without TGF-ß and/or CD-44 expression was significantly lower than that of patients with positive expression (p = 0.003).

Regardless of patients' age, CD-44 was significantly higher in the cancer tissue of elderly patients than in younger patients (median 15.4 months) (p = 0.035). But no significant difference was observed in the proportion of patients with TGF-ß and/or CD-44 expression (p = 0.045). The median survival rate of patients without TGF-ß and/or CD-44 expression was significantly lower than that of patients with positive expression (p = 0.003).

Elderly patients have statistically significant better survival (median 20.2 months) compared with younger patients (median 15.4 months) (p = 0.005). Among elderly patients, CD-44 was significantly higher in the cancer tissue of patients with TGF-ß expression compared with patients without TGF-ß expression (p = 0.003). But no significant difference was observed in the proportion of patients with TGF-ß and/or CD-44 expression (p = 0.045). The median survival rate of patients without TGF-ß and/or CD-44 expression was significantly lower than that of patients with positive expression (p = 0.003).
Introduction: Gastric resection surgery and associated lymphadenectomy are essential for the treatment of gastric cancer. Gastric resection surgery is often associated with significant perioperative blood loss requiring blood transfusion. The effect of these transfusions remains controversial. Our objective was to analyze their impact on relapse and survival after resection surgery. We also wanted to identify risk factors for the perioperative blood transfusion.

Methods: Retrospective analysis of a prospective database (n = 476) with gastric cancer cases submitted to curative intent surgery between January 2010 and December 2015, in an Upper GI Surgery Unit. We analyzed 243 patients than met the inclusion criteria for this study; 37 of those required perioperative blood transfusion.

We analyzed the following variables: age, gender, comorbidities, ASA score, BMI, neoadjuvant treatment, TNM stage, tumour size, surgery type, type of surgical approach, duration of surgery, lymphadenectomy type, associated splenectomy, associated hepatectomy, histological type, Lauren’s and Ming’s classifications, tumour location, number of resected lymph nodes, macroscopic type of tumour, resection margins (R), length of hospital stay and complications.

Results: Perioperative blood transfusion had a negative effect in disease-free survival (p = 0.007) and overall survival (p < 0.001).

In univariate analysis lymphadenectomy type, R, T-stage, neoadjuvant treatment, type of surgical approach, associated hepatectomy, associated splenectomy, ASA score, presence of comorbidities, age and tumour size were significantly correlated with perioperative blood transfusion. In multivariate logistic regression analysis (stepwise forward) the type of surgical approach, T-stage and age were significantly and independently correlated with perioperative blood transfusion.

Conclusion: This study shown a worse prognosis in patients that required perioperative blood transfusion. Strategies to reduce blood losses should be implemented especially in patients with the risk factors identified.