

## **Prognostic value of the preoperative neutrophil to lymphocyte ratio in advanced gastric cancer after radical resection: A multi-centre retrospective propensity score-matched study**

**Alpha Ibrahima Balde**

Qingyuan Second People Hospital, China

**Background:** Advanced gastric cancer (AGC) has a high morbidity, recurrence rate and a poor prognosis. Although previous studies have reported the role of the neutrophil to lymphocyte ratio (NLR) in AGC, little is known about its impact after radical resection.

**Methods:** A multi-centre, retrospective, 1:1 propensity score-matched study of advanced adenocarcinoma gastric cancer was conducted between 2012 and 2017 based on a cut-off value (2.945) calculated from a receiver operating characteristic (ROC) curve.

**Results:** The recurrence rate was higher in the high NLR group ( $P<0.001$ ). Serosal invasion ( $p=0.049$ ) and tumour differentiation ( $P=0.011$ ) were different. Univariate analysis showed that high NLR ( $P<0.001$ ) and tumour invasion ( $P<0.001$ ) were related to overall survival (OS). Multivariate analysis revealed that recurrence ( $p<0.001$ ) was independently associated with OS. Well-differentiated tumours ( $P=0.027$ ) and a high NLR ( $P<0.001$ ) were associated with recurrence, while the risk of tumour invasion was correlated with a high NLR ( $P=0.001$ ) and stage IIIb ( $P=0.043$ ). Clinical assessment of 13.38 ( $\pm 9.07$ )-month revealed that OS ( $P<0.001$ ) and RFS ( $P<0.001$ ) were worse between matched group.

**Conclusions:** These results suggest that an elevated preoperative NLR could be a strong prognostic indicator for AGC.

### **Biography**

Alpha Ibrahima Balde MD, MS, FWAMS received his medical degree from Chinese first military medical university (Southern Medical University). With his keen interest in surgery and clinical research he attended many surgeries in the field of laparoscopic gastric cancer, laparoscopic colorectal surgery, thyroid, hernia, Hepatocellular biliary carcinoma with eminent professor of the tertiary hospital. He is an active researcher in the field of gastric cancer, colorectal cancer, thyroid, liver disease. He received his post graduate degree (Master of surgery at SMU) he published many articles as co-author and also as first author in prestigious journal like Surgical Endoscopy, colorectal disease. He is the recipient of the Guangdong province Guangzhou government of two awards as the best international student for his achievement in clinical research. He is currently attending surgery with the best professors in SMU and leading the activities of the WAMS Chinese council in china for the service of the mankind.

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