

## gastrointestinal tumours, colorectal

### 531P NEUTROPHIL/LYMPHOCYTE RATIO AND PIASTRINOSIS CORRELATE WITH CLINICAL OUTCOME IN METASTATIC COLORECTAL CANCER PATIENTS RECEIVING REGORAFENIB

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**Aim:** A non-negligible proportion of colorectal cancer patients receiving regorafenib does not seem to benefit from such a treatment approach and are then exposed to unnecessary toxicity. Neutrophil/lymphocyte ratio and piastrinosis (platelet number increase) may represent indirect indicator of tumour induced inflammation and angiogenesis and have been suggested to influence patients' outcome. Our analysis investigated the role of neutrophil/lymphocyte ratio and piastrinosis in pretreated metastatic colorectal cancer patients receiving regorafenib.

**Methods:** We collected neutrophil, lymphocyte and platelet count at the start of treatment. Cut-off values for neutrophil/lymphocyte ratio and platelets were calculated by ROC curve analysis. Other tested variables were: age, sex, performance status, k-ras status, number of metastatic sites, previous adjuvant chemotherapy, number of previous systemic anticancer therapies, Overall survival (OS) and progression free survival (PFS) were calculated by Kaplan-Meier method, multivariate analysis was performed by Cox method.

**Results:** 208 patients were eligible. In the global population median OS was 4.2 months whereas median PFS was 2.4 months. Ten (5%) achieved a partial response, 58 (29%) disease stabilization and the remaining 134 (66%) progressed under treatment. The cut off value for piastrinosis and neutrophil/lymphocyte ratio was determined at 0.545 ULN and 0.381 respectively. At univariate analysis neutrophil/lymphocyte ratio and piastrinosis both correlated with clinical outcome. At multivariate analysis a high platelet count and high neutrophil/lymphocyte ratio were related to a worse OS (Exp (b):1.49, 95%CI:1.0130-2.2103, p = 0.0439 and Exp(b):1.6963, 95%CI: 1.0757-2.6751, p = 0.0237 respectively) and PFS (Exp(b):1.4985, 95% CI: 1.0925-2.0556, p = 0.0126 and Exp(b): 1.9277, 95% CI: 1.3226-2.8097, p = 0,0007 respectively). Interestingly in 52 (25%) patients negative for these factors, median overall survival was 15.9 months vs. 3.1 months for patients harbouring at least one of the factors examined (HR:3.81, 95% CI:2.3260-4.8274, p < 0.0001).

**Conclusions:** Our analysis suggests that a high platelet count and a high neutrophil/lymphocyte ratio are predictive factors for clinical outcome in patients treated with regorafenib.

**Disclosure:** All authors have declared no conflicts of interest.