120P **Platelet to lymphocyte ratio is associated with tumour localization and outcomes in patients with metastatic colorectal cancer**

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Background: The prognostic importance of platelet-to-lymphocyte ratio(PLR)has been also investigated in some cancer types including colorectal cancer (CRC).Several studies have found that PLR is associated with poor prognosis in patients with CRC,but,the results are controversial.The aim of this study was to investigate the predictive and prognostic value of PLR,and the relationship between PLR and tumor localization.

Methods: A total of 201 patients with metastatic CRC and candidate to systemic treatments were retrospectively analyzed.Pretreatment complete blood cell count was evaluated to calculate PLR.The cutoff value for PLR was defined by the receiver operating characteristic(ROC)curve analysis and threshold value of 205.5 as best cut-off value was found.The prognostic and predictive significance of PLR was evaluated by univariate and logistic regression analysis.

Results: Significant relationship was detected between PLR and BRAF mutation,tumor localization.The higher rate of BRAF mutation was significantly detected for patients with $PLR^{high}(> 205.5)$compared to those with $PLR^{low}(<205.5)(p = 0.006)$.In addition,PLR was significantly higher in tumors located on the right colon than those with tumor on the left colon$(p = 0.026)$.PLR, the presence of the primary tumor surgery, tumor localization, the presence of metastasectomy for progression-free survival(PFS)andPLR,age, BRAF mutation and the type of targeted therapy for overall survival(OS)were found to be prognostic factors by univariate analysis.Moreover,a logistic regression analysis indicated that PLR and the presence of metastasectomy were

found to be an independent factors for predicting response to systemic treatment($p < 0.001$,OR:0.30, 95%CI 0.16-0.34 and $p = 0.020$,OR: 0.40,95%CI 0.18-0.38,respectively).

Conclusions: Our results showed that pretreatment PLR was readily feasible and simple biomarker predicting response to treatment and survival,in addition it was significantly associated with tumor localization for patients with metastatic CRC.PLR may reflect immunogenic phenotype of patients with CRC.