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砂川 優先生(聖マリアンナ医大)の論文が Clinical Colorectal Cancer 誌に掲載されました

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Immune-related genes to dominate neutrophillymphocyte ratio (NLR) associated with survival of cetuximab treatment in metastatic colorectal cancer

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Patients and Methods

In 77 patients with KRAS exon2 wild-type mCRC from prospective trials of 1st-line chemotherapy with cetuximab, expression levels of 354 immune-related genes were measured in tissue samples obtained from all patients by the HTG EdgeSeq Oncology Biomarker Panel. The association between the NLR and clinical outcomes was evaluated using Spearman's rank correlation coefficient. In addition, two-sample t-tests were performed to investigate which genes among the top 100 genes associated with survival had significantly different expression levels between the NLR-low and NLR-high groups among all measured genes.

Results

NLR data were available for 71 patients. The NLR was associated with progression-free survival (PFS) and overall survival (OS) (r=-0.24; p=0.040 and r=-0.29; p=0.010, respectively). When stratified by the median value of the NLR, the Kaplan-Meier curve of NLR-low vs. NLR-high differed significantly for both PFS (median 11.8 vs. 9.1 m, p=0.036) and OS (median 42.8 vs. 26.7 m, p=0.029). The two-sample t-test revealed that the expression levels of the LYZ, TYMP, and CD68 genes differed significantly between the NLR-low and NLR-high groups (t-test p-value <0.005, FDR p-value <0.15).

NLR と cetuximab 治療効果との関連が明らかにされました。