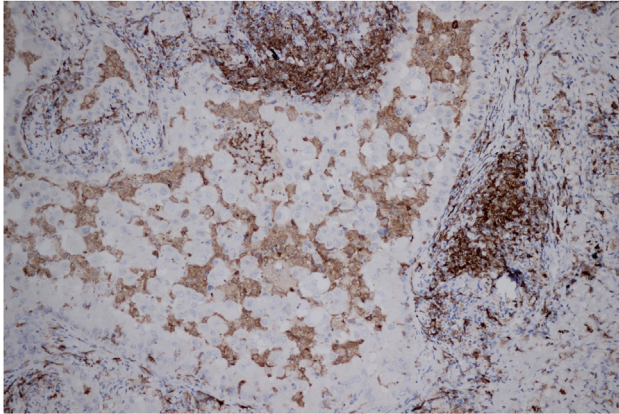


between 2009-2014 with stored paraffin sections and survival information were also retrieved to assess the prognostic value of BTK (cohort 2). All samples were stained by IHC for BTK (EPR20445) and PD-L1 (SP142). **Result:** The overall expression rates of BTK expression on tumor and stromal cells were 11.9% and 87.1% respectively in cohort 1, which did not differ across histological types or other clinical features. Both tumoral expression ($\chi^2=8.84$, $P<0.01$) and stromal expression ($\chi^2=3.96$, $P=0.047$) of BTK were positively correlated with tumoral PDL1 expression. In cohort 2, we found that the stromal ($HR=1.49$, $P=0.03$) but not tumoral ($HR=0.74$, $P=0.20$) BTK expression was significantly correlated with poorer prognosis, after adjusting for tumoral PDL1 expression ($HR=0.58$, $P<0.01$) and other covariates.



Conclusion: This is the first study showing the presence of BTK expression and its positive correlation with PDL1 expression in NSCLC. Stromal BTK expression predicts poor prognosis in NSCLC patients. This study shed light on the biological effect of BTK-expressing cells and treatment potential of targeting relevant pathways. **Keywords:** Brutons tyrosine kinase (BTK), NSCLC, prognosis

P2.03-51

Gene Variants and Expressions of Galectin-3 Is Associated with Non Small Cell Lung Cancer and Vascular Invasion of the Tumor

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Background: Galectin-3 is a β -galactoside binding protein and known for its deregulation in cancer. In previous studies, correlations between single nucleotide polymorphisms (SNP) and cancer development have been identified in the context of genetic susceptibility to different types of cancer. However, potential phenotypic variations related to galectin-3 SNPs have not yet been evaluated in non-small cell lung cancer (NSCLC). **Method:** In this study, it was aimed to correlate expression levels of gene and protein galectin-3 with genotype and allele distribution of rs4644 and rs4652 SNPs of galectin-3 between NSCLC patients ($n=65$) and healthy control ($n=95$) individuals. SNPs rs4644 and rs4652 in galectin-3 were studied using TaqMan Real-Time PCR system. Tissue gene expression levels of galectin-3 for patients was also analysed by Real-Time PCR. Galectin-3 serum levels were measured by ELISA. **Result:** There were no significant differences in genotype and allele distribution of SNPs and galectin-3 gene expression levels between the tumor tissues compared to tumor surrounding tissues ($p>0.05$); Mean serum level of galectin-3 was significantly higher in

patients (26.05 ± 1.77 ng / ml) than that of controls (11.62 ± 1.30 ng/ml) ($p < 0.0001$). The presence of angiolymphatic invasion was statistically significantly associated with AA genotype ($p = 0.04$). SNP rs4644 AC/CC genotype was found to be associated with higher serum galectin-3 levels in patients compared to that of controls ($p<0.0001$) while SNP rs4652 with AA / AC genotype was associated with lower serum galectin-3 levels in controls compared to patients ($p<0.0001$). Serum galectin-3 level has been shown to be statistically significantly associated with of vascular invasion among patients who had AC genotypes for both SNPs rs4644 and rs4652 ($p = 0.03$; $p = 0.019$ respectively). **Conclusion:** Galectin-3 could be defined as a possible biomarker for NSCLC and it plays a role as surrogate marker for vascular invasion in tumors. **Keywords:** Polymorphism, galectin-3, carcinogenesis

P2.03-52

Correlation Between Inflammatory Markers and Oncological Outcomes in Surgically Resected Non-Small Cell Lung Cancer



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Background: Various systemic inflammatory factors have been recognized as predictive markers of oncological outcomes in human malignant diseases. Recently, combined scores of inflammatory factors of preoperative peripheral blood have been reported as more sensitive and powerful markers for predicting oncological and survival outcomes in several solid organ malignancies. In the present study, we evaluate the predictive value of various inflammatory parameters for oncological outcomes in non-small cell lung cancer patients. **Method:** We retrospectively reviewed patients with non-small cell lung cancer undergoing complete resection with pathological nodal evaluation between January 2016 and February 2019 in our department. We assessed the correlation between inflammatory factors including combined parameters from preoperative peripheral blood and pathologic findings expressing oncological invasiveness such as pT3/T4, solid/micropapillary subtype in adenocarcinoma, pleural invasion, lymph node metastasis, and any sort of M factors. The evaluated inflammation-related scores are follows; C-reactive protein (CRP), neutrophils, lymphocytes, albumin, platelets, lactate dehydrogenase (LDH), alkaline phosphatase (ALP), lymphocyte-CRP ratio (LCR), CRP-albumin ratio (CAR), platelet-albumin ratio (PLR), neutrophil-lymphocyte ratio (NLR), lymphocyte-LDH ratio (LLR), albumin-ALP ratio (AAR) and LDH-albumin ratio (LAR). Preoperative carcinoembryonic antigen (CEA) level and maximum standard uptake value (SUV max) of FDG-PET on primary lesions were also evaluated as known predictive markers of oncological outcome in non-small cell lung cancer. **Result:** A total of 306 patients were enrolled in this study. The following data are clinicopathological findings of this cohort; age: 69.5 ± 9.9 , gender: male 212, female 94, histology: squamous 64, adeno 230, adenocarcinoma 4, other 8, solid/micropapillary in adeno 52, pT3/T4 35, positive pleural invasion 75, positive lymph node metastasis 56, positive M factor 1 (dissemination). Results of significant predictive markers are follows ($p<0.05$, a stronger marker is placed on left side); CRP, CEA, NLR, SUV for pT3/T4, CRP, albumin, LDH, SUV for positive pleural invasion, CRP, CEA, LAR, albumin for pN positive, respectively. No predictive markers were identified regarding histological subtype in adenocarcinoma. **Conclusion:** In non-small cell lung cancer patients, combined inflammatory scores derived from preoperative peripheral blood could predict limited oncological outcomes. Known predictive markers such as CRP, CEA and SUV max on PET-CT reflected the outcomes more strongly. **Keywords:** Non-Small Cell Lung Cancer, biomarker, inflammatory maker