baseline had a median survival of 7.6 months, contrasted to 15.8 months for those without this degree of 3-IGI decline ($p = 0.01$); 1 year survivals = 26% versus 62%. Even with the marked PRO decline after 2 treatment cycles, patients in the 20% decline group received a median of 2.3 more cycles of the same chemotherapy (median cost = $10,712 per patient). In the 50% of patients for which their physicians knew the ongoing LCSS results, fewer chemotherapy and imaging studies were performed, but the differences were not significant ($p = 0.8$). **Conclusion:** s: Assessing change from baseline with the 3-IGI of the LCSS identifies after only 2 cycles of treatment those patients who have poor response and survival outcomes if continued on the same therapy. This PRO assessment is rapid, easy, and inexpensive. Physicians need to consider the impact of decline on decision options given that even when physicians were aware of the worsening PRO they often did not act on the findings. Patient responses to this validated PRO questionnaire provide valuable information that is not otherwise attainable. Responding to 3-IGI changes can result in better decisions concerning continuing or changing treatment, lessening toxicity, and savings in cost of unhelpful treatment. Supported by: NIH/NCI R01 CA157409 **Keywords:** LCSS, PRO, 3-IGI

P2.01-40
Prognostic Importance of Sarcopeni and Inflammatory Statements in Stage III Non Small Cell Lung Carcinoma

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Background: Sarcopenia is characterized by progressive loss of skeletal muscle mass, muscle strength and physical performance. Systemic inflammation is thought to contribute to sarcopenia. Current retrospective evidence suggests that sarcopenia is an independent prognostic value on overall survival(OS). In this study, we aimed to investigate the prognostic significance of sarcopenia and inflammatory markers in stage III small cell lung cancer (NSCLC). **Method:** Eighty-three patients with stage III NSCLC undergoing definitive chemoradiotherapy in our clinic between April 2014 and August 2017 were evaluated. The cross-sectional area of muscle at the level of the third lumbar vertebra (L3) was measured using of radiotherapy planning CT images. Sarcopenia was defined as a L3 muscle index of less than 55 cm2/m2 for men and of less than 39 cm2/m2 for women as proposed by international consensus of cancer cachexia. Systemic inflammatory markers investigated included serum lactate dehydrogenase (LDH), neutrophil: lymphocyte ratio (NLR), C-reactive protein (CRP), and albumin(alb) . Relations between variables were determined by Pearson Chi Square and FischerExact Test. Risk factors affecting dependent variables were determined by CoxRegresson Analysis. **Result:** Seventy-five (90%) of the patients were male and 8 (10%) were female. The number of sarcopenic patients was 52 (62.6%). The mean age was higher in sarcopenic patients (68.3 ± 9.7 vs 63.7 ± 9.4, $p = 0.037$). There was no statistically significant difference between the groups with and without sarcopenia in the ratio of low albumin level, LDH height, N / L ratio. Mean survival was 18.14 months (2-48 months). In sarcopenic patients, OS was 17.2 months, while non-sarcopenic patients were 19.58 months ($p = 0.310$). When the effects on general survival were examined, it was found statistically significant that the presence of sarcopenia ($p = 0.016$), age ($p = 0,001$), low alb level ($p = 0,009$), N / L ratio is higher than 4 ($p = 0,003$). Multivarible Cox regression analyzes showed independent prognostic significance in survival with RT dose (HR (95% CI) = 1,2; $p = 0.001$), low albumin level (HR (95% CI) = 2.42; $p = 0.007$) and age (HR(95%CI)=1,03; p=0,044). **Conclusion:** In our study, the presence of sarcopenia in patients with stage III definitive KTRT NSCLC, as well as the LOW alb ratio and N / L ratio of inflammatory markers was found to be a significant prognostic factor for OS. We aim to investigate the prognostic significance of sarcopenia 'cutoff' value for Turkey with a prospective, multicenter, larger group of patients. **Keywords:** Sarcopenia, Non small Cell Lung Cancer, İnflammation statements, Albumin, Neutrophil/lymphocyte, prognostic factor

P2.01-41
The Role and Mechanism Of FBW7 Deficiency in Advanced Non-Small Cell Lung Cancer with Docetaxel Resistance

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Background: Lung cancer is one of the most common malignant tumors of human. NSCLC accounts for about 80%-85% of all lung cancer, and 65%-80% of NSCLC patients have been diagnosed at the advanced stage[1]. Because of the existence of drug resistance, many patients have relapsed or progressed soon after chemotherapy, and the resistance always lead to unsuccessful effect. Docetaxel is an anti-microtubule chemotherapeutic agent that acts on cellular tubulin, which can prevent the normal physiological accumulation of intracellular microtubules , resulting in the withering of cells[2]. Like other chemotherapeutic drugs, the drug resistance of docetaxel reduces its efficacy. **Method:** RT-PCR and Western-blot were used to detect the differences of FBW7 expression in docetaxel-resistant cell line SPC-A1/DTX and parental SPC-A1 cells, and the overexpression and interference sequences of FBW7 were constructed. The SPC-A1/DTX and parental SPC-A1 cells were transfected with lentiviral packaging, and the SPC-A1/DTX FBW7 O/E cell line and SPC-A1 FBW7 D/R cell line were screened by monoclonal screening method. RT-PCR and Western-blot were also used to detect the differences of FBW7 expression among SPC-A1/DTX, SPC-A1/DTX FBW7 O/E, SPC-A1 and SPC-A1 FBW7 D/R cell lines. Finally, MTT colorimetric assay and colony formation assay were used to research the effects of regulation of FBW7 on the sensitivity to docetaxel. **Result:** RT-PCR and Western-blot proved that the expression of FBW7 in NSCLC docetaxel-resistant cell line SPC-A1/DTX was significantly lower than that of parental cell line SPC-A1. With lentiviral transfection and monoclonal screening, a SPC-A1 FBW7 D/R cell line with down-regulated FBW7 expression and an SPC-A1/DTX FBW7 O/E cell line with up-regulated FBW7 expression were constructed. The expression of FBW7 in SPC-A1 cell line and SPC-A1/DTX FBW7 O/E cell line was higher than that of SPC-A1/DTX FBW7 O/E cell line and SPC-A1 by RT-PCR and Western-blot. /DTX cell line. Finally, MTT colorimetric assay and colony formation assay showed that SPC-A1 cell line and SPC-A1/DTX FBW7 O/E cell line were more sensitive to docetaxel than SPC-A1 FBW7 D/R cell line and SPC-A1 /DTX cell line. **Conclusion:** For non-small cell lung cancer, the sensitivity to docetaxel was higher in cells with high expression of FBW7 than the cells with low expression of FBW7; the loss of FBW7 gene was associated with drug resistance of NSCLC to docetaxel. However, the specific mechanism of FBW7 deletion causing non-small cell lung cancer resistance to docetaxel still needs further study. **Keywords:** FBW7 (F-box and WD repeat domain -containing7) , non-small cell lung cancer, docetaxel

P2.01-42
Impact of Tobacco Smoking on Outcomes in Patients with Metastatic Non-Small Cell Lung Cancer in the Era of Targeted Therapy

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