SB04

# NON-SMALL-CELL LUNG CANCER (NSCLC) HARBORING DRIVER MUTATION (EGFR MUTATION OR ALK TRANSLOCATIONS) WİTH CLINICAL CHARACTERISTICS AND MANAGEMENT IN A REAL-LIFE SETTING: A RETROSPECTIVE OBSERVATIONAL MULTICENTER CASE SERIES STUDY

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Introduction - Purpose: Introduction: Lung cancer is a leading cause of cancer-related mortality. The most common type of lung cancer is Non-small-cell lung cancer (NSCLC). Molecular targeting drugs are used in the treatment of patients with metastatic NSCLC who have a driver mutation. In this study, we aimed to investigate the relationship between the selected treatment modality in the first line setting, patients characteristics and outcomes on NSCLC patients who had driver mutations.

Methods - Tools: Material and Methods: We designed current observational study to explore main clinicopathological characteristics of patients treated with TKİ targeted therapy and their effect on patient the effect of the targeted therapy treatment line of tyrosine kinase inhibitors on survival parameters and disease prognosis in NSCLC patients. We enrolled 65 patients with NSCLC who had driver mutations at Sanliurfa Research and Training Hospital, Baskent University Department of Medical Oncology and Acıbadem Mehmet Ali Aydinlar University Department of Medical Oncology.

Findings: Results: Median age was 62 years old (range 30-81). 46 (70.8) of the patients had EGFR mutation and 19 (29.2) had EML4-ALK fusion gene rearrangement. 23 (35.4) of EGFR mutation patients had exon 19 deletions and 16 (24.6) of these patients had exon 21 mutation. Median overall survival (OS) and progression free survival (PFS) was 26 months and 9 months, respectively. There was no statistically significant correlation between overall survival and occuring EGFR or ALK mutation (p:0.48). Among patients with EGFR mutation, survival times for patients with exon 19 deletions were statistically significantly higher than those with exon 21 mutations (p:0.007). The overall survival time of oligometastatic patients was statistically significantly higher than the other patients (p: 0.001). The PFS of patients who received tyrosine kinase inhibitor in first-line treatment was statistically significantly higher than patients using chemotherapy in first line setting. (18 months vs 5 months) (p:0.005)

Discussion: Conclusion: This study showed that treatment preference in favor of tyrosine kinase inhibitors in first line setting produce fairly good outcomes in metastatic NSCLC patients who had driver mutations.

Keywords: Driver mutation, TKIs, NSCLC

Figure-1

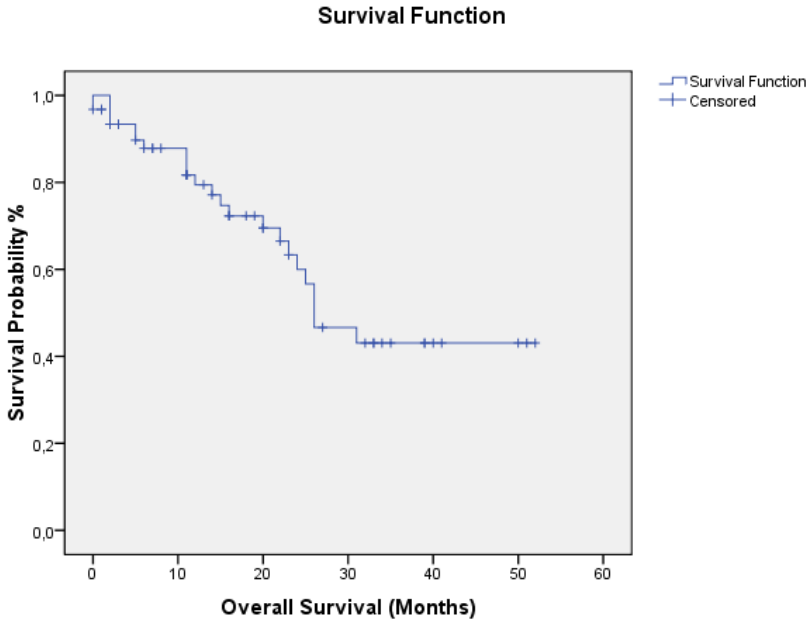
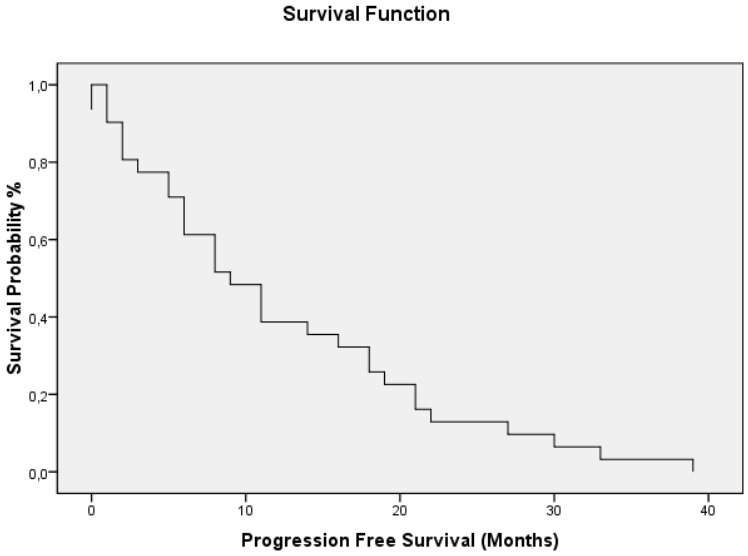



figure-2



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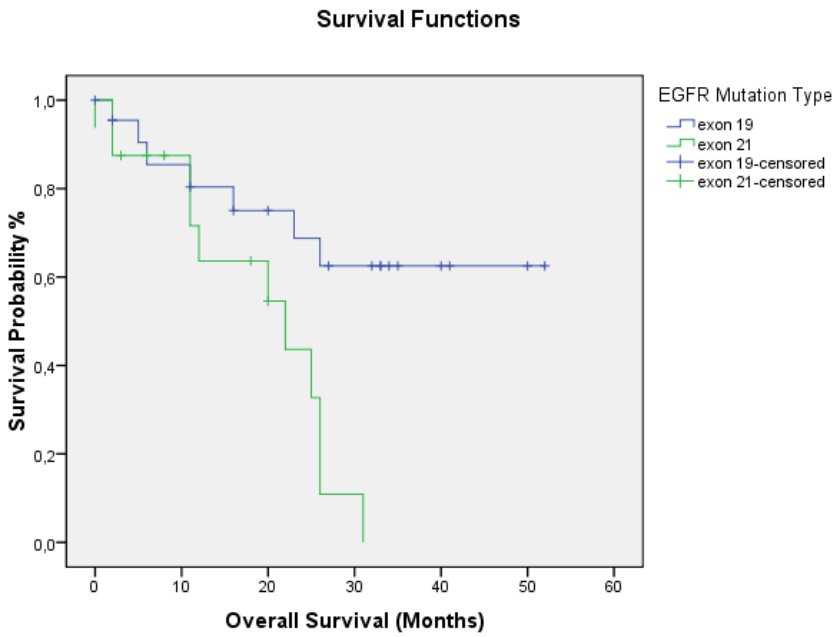


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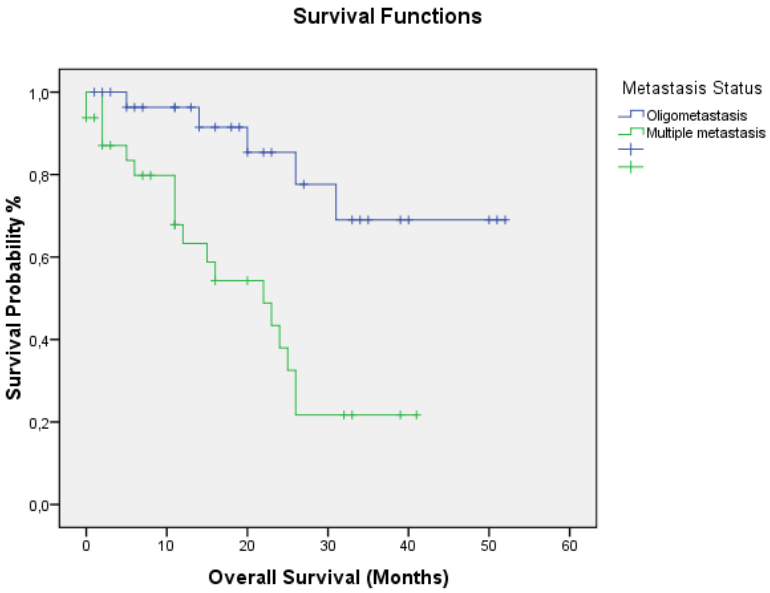

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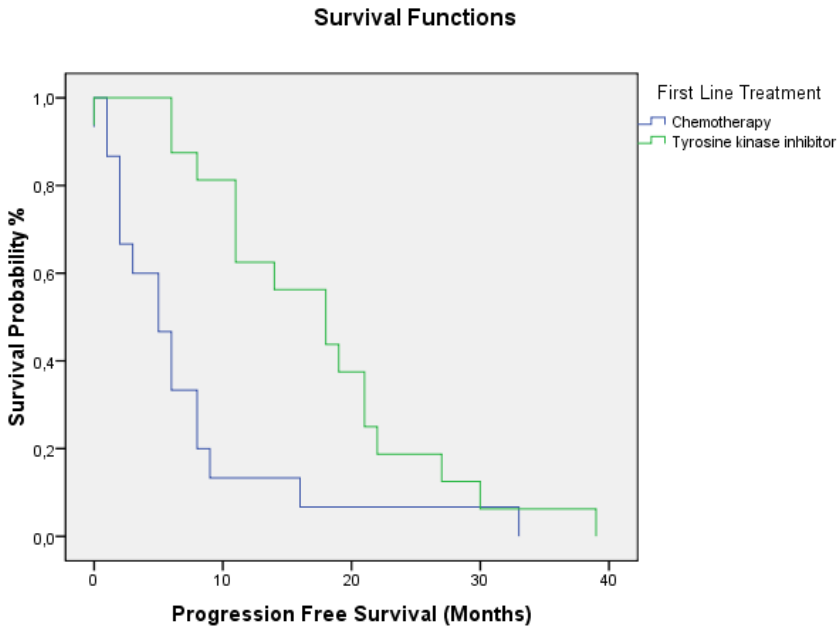
Survival Functions
Survival Probability %
1,0
0,8
0,6
0,4
0,2
0,0
0
10
20
30
40
Progression Free Survival (Months)
First Line Treatment
Chemotherapy
Tyrosine kinase inhibitor