advanced NSCLC

137P **RISK FACTORS FOR SKELETAL-RELATED EVENTS IN PATIENTS WITH NON-SMALL CELL LUNG CANCER PATIENTS WITH BONE METASTASES**

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Aim: We purposed to determine the risk factors for SREs (skeletal related events) SRE free survival and overall survival in NSCLC patients with bone metastasis.

Methods: We retrospectively reviewed the data of 335 NSCLC patients with bone metastasis. The association between clinicopathological features of the patients with respect to the presence of SRE was compared with the chi-squared test and Fisher's exact test. The survival analyses and curves were established with the Kaplan-Meier method. To identify predictive factors related to SRE, logistic regression analysis was used.

Results: Of the 335 patients, 244 (72.8%) patients developed SREs at the diagnosis or during treatment of disease. Of these, 145 required radiotherapy to the bone or pathological fracture, 59 developed malignant hypercalcemia, 21 developed compression fracture of the vertebrae and 5 required surgical treatment of the bone. The mean time-to first SRE was 6.9 months at the median follow-up of 17months. A multivariate analysis demonstrated that the presence of bone metastasis at diagnosis ($p < 0.001$, HR:1.96), number of bone metastasis ($p < 0.001$, HR:1.70) and the presence of palliative radiotherapy ($p = 0.011$, HR:1.68) were independent prognostic indicators for SRE-free survival. The results of univariate analysis revealed that PS, the presence of bone metastasis at diagnosis, number of bone metastasis, SRE, the presence of palliative radiotherapy and bisphosphonate therapy were significant prognostic factors for OS. The median OS interval for patients with SRE were worse than for patients without SRE (7 vs. 12 months, $p < 0.001$). All of significant factors were found to be independent prognostic indicators for OS in the multivariate analysis. Logistic