Title: Is there a difference in response to first line chemotherapy related to age in patients with locally advanced or metastatic non-small lung cancer?

Body: Aim: Elderly population has higher incidence of non-small cell lung cancer and until recently was not treated with platinum-based chemotherapy. In this retrospective study we analyzed is there a difference in response rate to frontline chemotherapy related to patients’ age. Methods: In this retrospective study we analyzed medical data of a group of 186 patients with stage IIIB and IV non-small cell lung cancer who were eligible for chemotherapy depending on their ECOG performance status, hepatic and renal function. Patients were divided in 4 groups depending on age: group 1 was for patients younger then 60 years, group 2 for 61- to 65-year-old, group 3 was for 66- to 70-year-old and group 4 was for patients older then 71 years. Patients in all groups received platinum based doublet chemotherapy as frontline treatment. Radiological assessment was made after every two cycles of the therapy and response was defined as complete response, partial response, stable disease or disease progression. Results: There were 64 patients in group 1, 34 patients in group 2, 31 in group 3 and 57 in group 4. At radiological evaluation after frontline therapy disease control (complete response, partial response or stable disease) was achieved in 57,8%, 67,6%, 61,3% and 64,9% respectively. There was no statistically significant difference in response to first line chemotherapy regarding age of patients (P=0,767). Conclusion: there is no difference in disease control rate to the first line chemotherapy related to age of patients with locally advanced or metastatic non-small lung cancer.