Oncology of the chest

## **Elderly Lung Cancer Patients with EFGR Mutations**

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Lung cancer is the most frequent cancer in the world. Most patients with that diseases are over the age of 65. The choice of the method of therapy in that group of patients is limited. The target therapy based on thyrosine kinase inhibitors (TKI) has emerged few years ago. The specific EGFR mutations are widely accepted predictive factor for TKI treatment. The goal of the study was to evaluate EGFR mutation status in the patients  $\geq$  65 year of age, the tolerance and the effects of treatment with TKI in those with predictive positive EGFR mutations. 237 patients from Lower Silesian Center of Chest Diseases were included. In all cases mutation analyses were performed in the same laboratory by molecular biologist and pathologist. EGFR gene mutations were detected in 24 cases (10,12%). Six patients (age 66-80 years) were treated with TKI (2 with erlotynib, 4 with gefitynib). The duration of treatment was 1 - 23 four-weeks cycles. The termination of treatment was caused by disease progression in 5 patients . One patient died during first cycle due to pneumonia. There were no serious adverse effects caused by TKI during treatment. Conclusion: TKI treatment is well tolerated in elderly patients, but only small number of patients can be qualified to TKI treatment.

Key worlds: TKI treatment, lung cancer in elderly