hazard ratios (HRs) for OS decreased by an average of 4.5% for each additional 21-day interval of post-IP cumulative exposure to BV (Table).
Conclusions: This analysis of real-world data from the ARIES OCS suggests that incremental exposure to post-IP BV may be associated with improvements in OS in pts with advanced nonsquamous NSCLC. These data support the sustained use of maintenance BV following IP tx with CT + BV as in the E4599 protocol.

9091 POSTER

Quality of Life Assesment in Patients With Non-Small Cell Lung Cancer Patients Who Have or Have Not Received Second Line Chemotherapy

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Introduction: Advances in non-small lung cancer (NSCLC) treatment is limited. Disease progression is seen in most patients after first line chemotherapy and many patients receive second line chemotherapy.
Aim: A prospective study is planned to compare the life quality of NSCLC patients who received second line chemotherapy and those without second line chemotherapy.
Methods: EORTC QLQ-C30 Version 3.0 (Turkish version) is used to evaluate the quality of life of the patients. The questionnaire is given to the patients at baseline and repeated two times with monthly intervals.
Findings: Twenty-four of the total 40 patients entered the study received second line chemotherapy and 16 patients received only supportive care. There were no statistical difference in basal demographic and clinical features (general health condition, function and symptom scores) of the two groups. The general health status, overall function, overal symptom, physical function, role function, emotional function, social function, fatigue symptoms and pain symptoms scores were significantly better in patients who received second line chemotherapy. Cognitive function and dyspnea symptom scores were significantly better after second month in the patients who received second line chemotherapy. There were no statistical difference for nausea, vomiting, anorexia, constipation, diarrhea symptom scores between groups during the first and second month. While insomnia and financial difficulty symptoms scores were significantly better at first month in patients who received second line chemotherapy; no difference is seen in second month.
Conclusion: Our findings shows that second line chemotherapy in advanced NSCLC patients significantly improve the general quality of life when compared to only supportive care.

9092 POSTER

Efficacy of Tyrosine Kinase Inhibitor for Non-adenocarcinoma NSCLC Patients With EGFR Mutation

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Background: Lung cancer is the leading cause of cancer-related mortality. Adenocarcinoma hold a majority, and then squamous cell carcinoma about 20−30%. Nowadays, adenocarcinoma patients have many choices to chemotherapeutic agents including tyrosine kinase inhibitors(TKIs), but non-adenocarcinoma patients haven't yet. So we want to find the efficacy of TKIs in non-adenocarcinoma NSCLC.
Material and Methods: We found out 263 patients who check out EGFR mutation between January 2007 and December 2010. Forty-three patients received TKIs, ten patients have EGFR mutation. We divided two group, EGFR mutation positive and negative, there is no significant difference baseline characteristics. Most of patients are stage IV and TKI used for 2nd or 3rd line treatment mainly.
Results: The objective response rate is 72.7% (PR 54.5%, SD 18.2%) in EGFR positive group, while 34.4% in EGFR negative group. There are no PR in EGFR negative group. The result is statistically significant. ($P < 0.001$) The median PFS is 3.83 months in EGFR positive group while 1.7 months in EGFR negative group. There are also clear difference, but no statistical significance ($P = 0.97$).
Discussions: This study shows the efficacy of TKI to EGFR muatation positive patients compared with EGFR mutation negative patients in non-adenocarcinoma NSCLC. Especially, this is single center study, so the data is consistent and homogenous. We can find the possibility of TKI in non-adenocarcinoma NSCLC. It is warranted further large-scale studies.

9093 POSTER

The Role of Specific KRAS Mutation Types in Response to Treatment by EGFR Inhibitors

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Background: KRAS mutations can be found in 15 to 25% of lung cancers, frequently in adenocarcinomas and their presence is associated with smoking. The role of KRAS mutations in biological targeted therapy by EGFR inhibitors is ambiguous. While some reports clearly assigned mutated KRAS as negative prognostic factor and negative predictor, others did not confirm such notion. In our work we aimed to elucidate the role of specific type of KRAS mutation in outcome of patients with advanced NSCLC threated with EGFR-TKI therapy.
Patients and Methods: 448 patients with NSCLC were examined. 38 patients, treated with erlotinib or gefitinib were further evaluated. 30 patients were suffering from adenocarcinoma, 7 patients had squamous cell carcinoma including 1 patient with poorly diferentiated carcinoma. 37 patients were smokers and only 1 patient was never smoker. Statistical significance was scrutinized by a Log rank test at a 95% confidence level.
Results: KRAS mutation was detected in 69 patients. Among closely analysed patients, glycine to cystein substitution at codon 12 [G12C] was the most frequent type of KRAS mutation, detected in 24 cases. Outcome of patients with G12C [n = 24] and patients with other specific type of mutation [nonG12C] [n = 14] was compared. Median of TTP in the G12C group was 4.3 weeks in comparison with 9.0 weeks in the nonG12C group [p 0.009]. Median of TTP among patients with adenocarcinoma in the G12C group was 4.1 weeks in comparison with 9.0 weeks in the nonG12C group [p 0.007]. Median of OS in the G12C group was 9.3 weeks in comparison with 12.1 weeks in the nonG12C group [p 0.068], median of OS among patients with adenocarcinoma in the G12C group was 9.3 weeks in comparison with 10.6 weeks in the nonG12C group [p 0.095]. Analysis of OS was influenced by different oncological threatment after EGFR-TKI, different quality of basic supportive care and higher incidence of brain matestases in the nonG12C group.
Conclusion: G12C KRAS mutation is a strong negative predictor for EGFR-TKI threatment. Other specific types of KRAS mutation didn't prove such a negative predictive value and TTP was comparable to patients bearing wild type KRAS gene.

9094 POSTER

Phase II Study of S-1 and Vinorelbine in Patients With Advanced Non-small Cell Lung Cancer

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Background: The combination of 5-fluorouracil (5-FU) with vinorelbine has provided synergistic activity against non-small cell lung cancer (NSCLC) in experimental models. S-1 is an oral fluoropyrimidine, including a prodrug of 5-FU, tegafur. We conducted a phase II trial to evaluate the efficacy and toxicity for the combination chemotherapy of S-1 and vinorelbine in patients with advanced NSCLC.
Methods: Eligibility required ECOG performance status 0−1 and no prior therapy. Based on a phase I study, vinorelbine (20 mg/m^2) was infused on days 1 and 8, and S-1 (40 mg/m^2 twice daily) was administered on days 2 to 6 and days 9 to 13 of a 3-week cycle. The primary endpoint was response rate, and the secondary endpoints were overall survival, progression-free survival and toxicity.
Results: Among 36 patients enrolled, two withdrew consent during the first cycle. The response rate was 41% (14/34). The median survival and progression-free survival were 14.5 months and 5.5 months, respectively. Grade 3 or 4 leukocytopenia, neutropenia and anemia occurred in 33%, 56% and 6%, respectively. Grade 3 febrile neutropenia and lung infection occurred in 14% and 6%, respectively. As the most serious toxicity, pneumonitis was observed in three patients (8%).
Conclusions: This combination of S-1 and vinorelbine is both feasible and active in the treatment of patients with advanced NSCLC.