

designed the study to evaluate the role of Nimotuzumab in combination with chemotherapy in the patients with advanced non-small cell lung cancer (NSCLC).

Material and Methods: A retrospective review of the clinical data of Cancer Hospital, Tianjin Medical University identified 37 NSCLC patients who received Nimotuzumab in combination with chemotherapy from January 2009 to October 2010. Of 37 patients, 12 patients were in stage IIIB, 25 patients in stage IV; 24 patients received platinum-based chemotherapy in combination with Nimotuzumab, 13 patients received nonplatinum-based chemotherapy in combination with Nimotuzumab; 10 patients administered Nimotuzumab plus chemotherapy as first-line regimen, 23 patients as second-line regimen, 4 patients as third-line regimen.

Results: Of the 37 advanced NSCLC patients who received Nimotuzumab in combination with chemotherapy, the total number of chemotherapy were 137 cycles (mean 3.7 cycles); complete remission (CR) in one patient, partial remission (PR) in 9 patients, stable disease (SD) in 16 patients, progressive disease (PD) in 11 patients. The response rate (RR) was 27%, clinical benefit rate (CBR) was 70.3%. The main side effects were bone marrow depression and gastrointestinal reactions. Acneiform rash of grade I was found in one patient.

Conclusions: The regimen of Nimotuzumab in combination with chemotherapy could improve response rate and was well tolerated in the patients with advanced non-small cell lung cancer.

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POSTER

Role of Chemotherapy in ECOG Performance Status 3 Small Cell Lung Cancer – a Single Centre Study

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Background: The purpose of this study is to evaluate the treatment and its impact on survival of small cell lung cancer (SCLC) patients (pts) with ECOG Performance status (PS) 3 presenting to a single UK Cancer Network. There is no standard treatment policy for the pts with SCLC presenting with ECOG PS 3. These pts may experience symptomatic and survival benefits with chemotherapy (CT) but are at a greater risk of early treatment related death. Management of these patients vary from best supportive care to single agent or combination CT.

Methods: Retrospective analysis of all PS3 pts diagnosed with SCLC presenting from Jan 2005 to Dec 2009 at Merseyside & Cheshire Cancer Network. Data were prospectively recorded using an electronic minimum data set.

Results: A total of 978 pts were diagnosed with SCLC. Out of those 219(22%) pts presented with PS 3. Median age was 71 yrs (38–91 yrs). There were 117(53%) female and 102(47%) male pts. 182(83%) had extensive stage disease and 34(16%) had limited stage disease. Majority of pts (N = 182, 65%) did not receive any CT. Median overall survival was 3 months (mo). Median survival for those who had CT was 6 mo (95% CI 3.70–8.29) compared to 2 mo (95% CI 1.71–2.28) for those who were not treated (p-value <0.01). 21(27%) pts died within 30 days of receiving chemotherapy. Median survival for pts receiving platinum based combination CT (carboplatin and etoposide, N=40) was 7 mo (95% CI 2.6–11.4), for single agent carboplatin (N=31) was 5 mo (95% CI 2.7–7.37) and for oral Etoposide (N=6) was 2 mo (95% CI 1.4–2.6).

Clinical factors favouring longer survival were female gender, limited stage disease, absent or single site visceral metastases, weight loss of less than 5% of total body weight and minimal co-morbidities.

Conclusion: Overall survival is poor and treatment related early deaths are not uncommon in PS 3 SCLC patients but better selection of patients for CT can improve this. Pts benefited the most were female gender, with limited stage disease and those treated with combination chemotherapy. The optimum CT regimen remains to be defined.

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POSTER

Anaemia Risk With Anti-EGFR Agents in Advanced Non Small Cell Lung Cancer – a Meta-analysis of 10 Trials

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Background: Anaemia is a prevalent event in advanced non small cell lung cancer (NSCLC) patients related to the disease and to the myelosuppressive effect of chemotherapy. Are the widely used anti-epidermal growth factor receptor (EGFR) agents, additional potential causes of treatment-related anaemia?

Patients and Methods: Databases from PUBMED until December, 2010 were searched. Eligible studies included prospective randomized controlled trials in which standard anti-neoplastic therapy (or best supportive care) was administered with and without the use of erlotinib, gefitinib or

cetuximab, with available data of anemia. Summary incidence rate, relative risk (RR), and 95% confidence interval (CI) were calculated employing fixed- or random-effect models based upon the heterogeneity of the included studies. RevMan v. 5.1 (Cochrane IMS) has been used for statistical analysis.

Results: A total of 5700 patients from 10 studies in advanced NSCLC were included for analysis. Among all patients the incidence of anemia was 18% (95% CI: 16.55–19.6%). In comparison with standard therapy, anti-EGFR agents significantly increased the risk of anemia with an RR of 1.49 (95% CI 1.03–2.16, p=0.03 according to random effect model). Considering all studies with erlotinib and gefitinib, the risk of anaemia is even higher (RR 2.05; 95% CI 1.24–3.39, p=0.005 according to random effect model). In trials comparing only erlotinib or gefitinib plus chemotherapy with chemotherapy alone the RR of anaemia was 1.92 (95% CI: 1.16–3.2; p=0.01 according to random effect model).

Conclusions: Anaemia is a frequent event with anti-EGFR agents in particular with oral agents as gefitinib and erlotinib. This metanalysis shows that they exert an additive effect in NSCLC patients because they almost doubled the risk of development of anaemia compared to chemotherapy alone. Prevention and early treatment, in a setting where anaemia is already a common event, is crucial.

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POSTER

Phase II Study of Erlotinib Plus Gemcitabine in First Line Treatment of Poor Prognosis (ECOG PS 2) Advanced Non-small Cell Lung Cancer Patients

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Background: The combination of Erlotinib with chemotherapy has been a touchstone in advanced (IIIB and IV stages) NSCLC patients' treatment. The majority of clinical studies exclude patients with poor prognostic status (ECOG 2) and in this situation there are no clinical evidence for treatment of this patients.

Patients and method: Between August 2008 and April 2010, 20 patients with NSCLC stage IIIB (7pts) and stage IV (12 pts) with ECOG PS 2 have been randomized in the study; one patients wasn't included in final analysis; patients' characteristics were: male(16pts), female (3pts), median age 64 (range 47–75), smoking status: 3 non-smokers, 13 smokers, 3 non-declared, histological type: squamous cell carcinoma (7 pts), adenocarcinoma (9 pts), BAL (1pt), large cell carcinoma (2pts).

Study treatment: Gemcitabine 1000 mg/m² days 1–8–15 plus Erlotinib 150 mg/day in first line treatment of NSCLC. The treatment was administered for 6 cycles or until disease progression or unacceptable toxicity. Study objectives: primary objectives – response rate, TTP; secondary objectives – OS, safety and tolerability.

Results: The overall response rate was 15.8%, CBR was 36.84%, median TTP – 15 weeks (95% CI: 7–36), median OS – 39 weeks (95% CI: 27–51). The grade IV CTC toxicity was represented by diarrhea (1pt), respiratory infection (1pt), thrombocytopenia (1pt) and anaemia (1pt).

The concomitant diseases were recorded in every patient: COPD (3pts), arterial hypertension (9 pts), cardiac ischaemic disease (4 pts), congestive heart failure (3 pts), type II diabetes mellitus (2 pts), cirrhosis (2 pts), chronic renal failure (1pts), artheriopathy (3 pts), asthma (1 pts), prostate cancer (1pts), sarcoidosis (1pt), hyperthyroidy(1pt), dislipidemia (3pts).

Conclusions: Taking into account the published clinical studies regarding chemotherapy treatment of the same patients population (V. Gebbia et al. 2005) we observed that gemcitabine plus Erlotinib have superior response rate and superior overall survival with acceptable tolerability. This treatment combination represent a treatment option for patients with advanced NSCLC with ECOG PS 2, regardless by the pathological type, gender or smoking status. Maybe a phase III clinical study could bring more clinical evidence.

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POSTER

Prospective Multicenter Study of Pemetrexed and Carboplatin Combination Followed by Maintenance Pemetrexed in Chemo-naïve Patients With Non-squamous Non-small Cell Lung Cancer

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Background: Platinum-based chemotherapy is the standard first-line treatment for advanced non-small cell lung cancer (NSCLC); furthermore,