analysis, we used the assumption that PFS times were exponentially distributed, as described by the survival function $S_{exp}(t) = \exp(-\lambda t)$, where λ is the constant hazard rate. This is the simplest parametric assumption for a survival analysis. For an observed median PFS, the estimated value of λ for each study was obtained from the equation $\lambda = \ln(2)/\text{median PFS}$. For a reported % PFS at a fixed time $S_{exp}(T) = \gamma$, then λ was estimated by $-\ln(\gamma)/T$. The results of individual studies were pooled by calculating the overall mean of $\ln(2)/\lambda$ weighted by group size for each treatment group to obtain an estimate of the pooled median PFS.

Results: Data from 27 studies were included in our summary (6 chemotherapy, 13 gefitinib, 8 erlotinib). The number of patients included with *EGFR* mutations (total/1st-/2nd-line) were chemotherapy 192/170/22; gefitinib 413/311/102; erlotinib 341/185/156. Pooled median PFS values are presented in the table.

Conclusions: The results shown here provide a concise summary of the many reports on clinical outcomes in NSCLC pts with *EGFR* mutations. The summary of published data suggests that pts with *EGFR* mutations obtained a greater benefit from EGFR TKI therapy than from conventional chemotherapy. The use of EGFR TKIs as first-line therapy vs platinum-doublet chemotherapy in advanced *EGFR* mutation positive NSCLC pts is currently being investigated in ongoing prospective studies.

	Pooled median PFS months	
	First-line	Second-line
Chemotherapy	6.4	4.1
Gefitinib	9.7	8.8
Erlotinib	13.6	13.3

9155 POSTER

Sunitinib combined with pemetrexed and cisplatin in patients with advanced solid malignancies: phase I dose escalation study

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Background: Sunitinib malate (SU) is an oral multitargeted tyrosine kinase inhibitor of VEGFRs, PDGFRs, KIT, FLT3, CSF-1R and RET, approved multinationally to treat advanced RCC and imatinib-resistant/intolerant GIST. Preclinical studies in NSCLC xenograft models suggest that antitumor activity is enhanced by the addition of SU to pemetrexed (Pem). The maximum tolerated dose (MTD) of SU/Pem has previously been established. The MTD, safety and efficacy of SU/Pem/Cisplatin (Cis) are reported for the first time [NCT00528619: Pfizer].

Materials and Methods: Patients (Pts) in successive dose-escalation cohorts received oral SU (37.5−50 mg) either once daily on the continuous daily dose (CDD) schedule or Schedule 2/1 (2 wks of a 3 wk cycle), with Pem 400−500 mg/m^2 IV q21d and Cis 75 mg/m^2 q21d. MTD was defined as the highest dose at which $\leqslant$1/6 pts had dose-limiting toxicity (DLT) with $\leqslant$2/3 or 2/6 pts having DLTs at the next highest dose. Safety, pharmacokinetic (PK) profiles, and efficacy were also evaluated.

Results: As of March 2009, 16 pts with advanced solid tumors received SU/Pem/Cis. Five pts were treated on the CDD schedule (SU 37.5 mg/Pem 400 mg/m^2/Cis 75 mg/m^2) and 1 pt had a DLT (G4 neutropenia); MTD (CDD schedule) was not determined. On Schedule 2/1, 11 pts were treated (SU 37.5 mg/Pem 400 mg/m^2/Cis 75 mg/m^2 [n = 7]; SU 37.5 mg/Pem 500 mg/m^2/Cis 75 mg/m^2 [n = 3]; SU 50 mg/Pem 500 mg/m^2/Cis 75 mg/m^2 [n = 1]); one DLT occurred (G3 subclavian vein thrombosis; SU 37.5 mg/Pem 400 mg/m^2/Cis 75 mg/m^2). Determination of the Schedule 2/1MTD is ongoing. Most frequent non-hematologic AEs for pts on all SU/Pem/Cis schedules were constipation, nausea, diarrhea and fatigue. G3/4 hematological AEs in all cohorts were neutropenia (7/14 pts), anemia (4/16 pts) and thrombocytopenia (3/16 pts). G3 febrile neutropenia occurred in 2 pts. No significant PK interactions were identified on the SU/Pem arm; PK data for the SU/Pem/Cis arm are being investigated and will be presented. Of 4 evaluable pts on the CDD schedule, 1 pt had a partial response (PR; SCLC) and 1 pt had stable disease (SD; $\leqslant$6 mos; lung neuroendocrine carcinoma). Of 10 evaluable pts on Schedule 2/1, 1 PR (penile carcinoma) was observed and 5 pts had SD (>3mos [n = 3]; <3 mos [n = 2]).

Conclusions: The combination of SU/Pem/Cis was better tolerated on Schedule 2/1 compared with the CDD schedule. Determination of the MTD (Schedule 2/1) is ongoing. Antitumor responses were observed on both schedules.

9156 POSTER

Safe and long-lasting tumour control with erlotinib in advanced non-small cell lung cancer

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Background: Erlotinib, an EGFR tyrosine kinase inhibitor, demonstrated significantly prolonged survival, with low toxicity profile, in patients (pts) with advanced non small cell lung cancer (NSCLC), who had progressed after standard chemotherapy. The aim of our study was to estimate the efficacy and tolerability of erlotinib in pts with locally advanced/metastatic NSCLC, who had failed prior taxane and/or platinum-based chemotherapy.

Patients and Methods: Since EMEA approval through February 2009, thirty-one NSCLC pts received erlotinib (150 mg orally once daily) until disease progression or unacceptable toxicity. Safety profile was assessed according to NCI-CTCAE, version 3.0. Antitumour activity was evaluated by CT-scan every 3 months and response graded according to RECIST criteria. Kaplan-Meier method was used to estimate PFS and OS.

Results: The men-to-women ratio was 2/1. Median age was 66 years (range 39−77). ECOG PS was 0−1 in 18 pts (58%) and 2 in 13 pts (42%). 27 pts had data available for response evaluation. Erlotinib was administered as II-line treatment in 20 pts (65%) and III or superior line in 11 pts (35%). Median treatment duration was 9.9 months (range 1−37). Five pts (16%) had partial response (PR), lasting a median of 22 months (range 12−29), and 17 pts (55%) had stable disease (SD), lasting a median of 9 months (range 5−29), giving a disease control rate (DCR, complete response CR or PR or SD) of 71%. Nine pts (29%) had progressive disease after a median of 3 months (range 1−5). At the time of analysis, 11 pts are still on treatment (1 PR and 10 SD). Median overall survival (OS) was 8 months (95% CI, 4−18), with a 1-year survival rate of 42%. Median progression-free survival (PFS) was 5 months (95% CI, 3−15). Erlotinib was generally well tolerated. The most common adverse events (AEs) were rash (54%; maximum grade: G3, 12%) and diarrhea (22%; G3, 3%). For G2 AEs affecting quality of life we considered dose interruptions (3−5 days) or, if necessary, a dose reduction to 100 mg/day (29%); for G3 toxicity we reduced erlotinib dose at 100 mg/day (22%).

CONCLUSION: The safety profile appears favorable and manageable. Although modest response rate to erlotinib was observed, DCR was not restricted to any subgroup of pts who may achieve a long-term survival.

9157 POSTER

Retrospective review of efficiency of erlotinib or pemetrexed or docetaxel compared to docetaxel as subsequent line therapy in advanced non-small cell lung cancer (NSCLC) following failure of platinum-based chemotherapy

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Randomised trials of advanced non-small cell lung cancer (NSCLC) have demonstrated the activity of pemetrexed and docetaxel in second-line and erlotinib in second and third-line setting after failure of platinum-based chemotherapy. Here we explore the outcomes of these agents' uses in clinical practice.

A retrospective review of the NSCLC database at Portuguese Institute of Cancer in Lisbon, Portugal was undertaken. Patients who have received chemotherapy after failure of platinum-based chemotherapy were identified and a chart review was undertaken to access their clinical benefits. The use of pemetrexed and erlotinib in clinical setting was allowed in 2005 in Portugal. Patients were divided in two groups: those who had pemetrexed, erlotinib or docetaxel according to their doctors choice based on clinical data as 2nd line chemotherapy (Group A) and those who had docetaxel as 2nd line chemotherapy (Goup B). Primary outcome was overall survival (OS) after 2nd line chemotherapy and secondary outcomes were response rate (RR) and time to progression (TTP).

Results: We studied 102 patients who had 2nd line chemotherapy, 63 in group A and 39 in group B. OS was 42 weeks in group A and 31 weeks in group B (p = 0.2). Response rate was 22% in group A and 15% in group B. Median TTP was 17 weeks in group A and 14 weeks in group B (p = 0.5). In both groups there was 3rd line chemotherapy (44% in group A and 41% in group B).

Conclusion: For patients with advanced NSCLC who progressed following first-line platinum-based chemotherapy, although not significantly different, survival, RR and TTP were better in the group of patients in whom their clinicians chose their treatment according to their clinical characteristics. Maybe this was due the use of to 3rd line chemotherapy in a large number of patients in both groups.