Cetuximab combined with either gemcitabine followed by docetaxel or carboplatin/gemcitabine in chemonaive patients with advanced non-small cell lung cancer: Safety profile from the ongoing Phase II/III GemTax IV trial

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ABSTRACT

Background: The EGF-receptor antibody cetuximab is undergoing broad clinical investigation in NSCLC. Our understanding and awareness of safety of cetuximab combined with two different chemotherapy (CT) regimes in pts with advanced NSCLC (Phase II trial results are reported).

Methods: Patients with histologically confirmed stage IIIa or IV NSCLC WHO PS 0–2, and an ECOG CT performed within 40 days were treated with cetuximab 400 mg/m2 on day 1 followed by gemcitabine 1000 mg/m2 on day 1, q3w (Arm A) or gemcitabine 1200 mg/m2 on day 1 and carboplatin AUC 5 q3w for 4 cycles (Arm B); maintenance therapy with cetuximab until disease progression or unacceptable toxicity.

Results: 226 pts were evaluable for toxicity analysis. Clinically relevant toxicity (grade 3–4) occurred in 92% of patients in Arm A (defined as grade 3/4 thrombocytopenia + ≥1 platelet transfusion during the 3-week cycle) compared to 43% in Arm B. The incidence of grade 3–4 skin reactions related to cetuximab was 56% in Arm A and 20% in Arm B. Overall survival of patients receiving cetuximab in combination with chemotherapy was similar across both arms.

Conclusions: Cetuximab does not significantly increase CT toxicity in the induction phase and is well tolerated in the maintenance phase. Toxicity >75% of patients developed skin rash (grade 1/2 – 5% of patients).

INTRODUCTION

Chemotherapy for the treatment of patients with advanced or recurrent small cell lung cancer (SCLC) has been the standard of care for many years, with only modest improvements in overall survival. Despite advances in chemotherapy and supportive care for patients with advanced NSCLC, the survival benefit reported with some regimens has been modest. The EGF-receptor antibody cetuximab is undergoing broad clinical investigation in NSCLC. Our understanding and awareness of safety of cetuximab combined with two different chemotherapy (CT) regimes in pts with advanced NSCLC (Phase II trial results are reported).

Methods: Patients with histologically confirmed stage IIIa or IV NSCLC WHO PS 0–2, and an ECOG CT performed within 40 days were treated with cetuximab 400 mg/m2 on day 1 followed by gemcitabine 1000 mg/m2 on day 1, q3w (Arm A) or gemcitabine 1200 mg/m2 on day 1 and carboplatin AUC 5 q3w for 4 cycles (Arm B); maintenance therapy with cetuximab until disease progression or unacceptable toxicity.

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RESULTS

Patient characteristics

Between April 17, 2006 and April 4, 2008, 384 patients were enrolled at 24 centers in Germany and 1 in Lithuania; 273 patients who had received study medication and were evaluable for toxicity analysis are included in this analysis (Tables 1 and 2).

METHODS

A

B

Cetuximab administration

No 335

Grade 1 or 2 skin reactions related to study medication occurred in 70% of patients in Arm A and 23% in Arm B. The incidence of grade 1/2 skin reactions related to cetuximab was 55% in Arm A and 59% in Arm B (Table 5). For comparison of toxicity without cetuximab see references 11,13,14.

Comparisons of protocol discipline for single-agent cetuximab

In Arm A, 101 of 136 patients received maintenance cetuximab therapy with weekly single-agent cetuximab after completion of the chemotherapy phase.

Table 4. Hematologic toxicities in patients receiving chemotherapy plus cetuximab (maximum toxicity)