

oxaliplatin or carboplatin in our center and to find prognostic factors. We also examined the efficacy of second line chemotherapy based on 5-fluorouracil (5FU).

Patients and Methods: Fifty eight patients with metastatic unresectable BTC diagnosed between 2001 and 2010 were studied.

In first line of chemotherapy, a total of 44 patients received gemcitabine 1000 mg/m² (day 1) and oxaliplatin 100 mg/m² (day 1), every 2 weeks. 14 patients received gemcitabine at 1000 mg/m² on days 1 and 8 with i.v. carboplatin dosed at an area-under-the-curve (AUC) of 5 on day 1 of a 21-day cycle.

In second line a total of 19 patients on 58 received a chemotherapy based on 5FU: 10 a monochemotherapy and 9 a bichemotherapy.

Results: With oxaliplatin and gemcitabine there were 3 confirmed complete response (6.8%) (RECIST), 5 partial responses (11.4%), 9 stable disease (20.4%) and 27 progression disease (61.4%). Median overall survival (OS) was 10 months [95% CI, 6–17] and progression-free survival (PFS) was 4 months [95% CI, 2–10]. The main toxicities were thrombopenia (9.1% grade 2 and 2.3% grade 3) and peripheral neuropathy (20.4% grade 2 and 6.8% grade 3).

With carboplatin and gemcitabine there were 1 complete response (7.1%), 1 partial response (7.1%), 5 stable disease (35.7%) and 7 progression disease (50%). Median overall survival was 4 months [2–10] and progression-free survival was 2 months [0–5]. The main toxicity was haematological: anemia (28.6% grade 2, 50% grade 3, 7.1% grade 4), thrombopenia (28.6% grade 2, 35.7% grade 3, 14.3% grade 4), neutropenia (14.3% grade 2, 35.7% grade 3, 7.1% grade 4).

Age, ECOG, tumour location and number of metastatic sites were not prognostic factors.

In second line the median PFS was 4 months (95% CI, 2–4) for the monochemotherapy group as compared with 3 months (95% CI, 2–4) in the bichemotherapy group. There was no significant difference between the two groups ($p=0.98$).

Conclusion: The gemox regimen in first line chemotherapy can be considered as a standard arm in the future studies. In second line, monochemotherapy based on 5 fluorouracil seems to be as efficient as bichemotherapy and it should be compared in randomised trials with best supportive cares.

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POSTER

Phase II Safety Study of the Oral Multikinase Inhibitor Regorafenib (BAY 73-4506) as Second-line Therapy in Patients With Hepatocellular Carcinoma

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Background: Regorafenib (BAY 73-4506) is a novel diphenylurea oral multikinase inhibitor of angiogenic (VEGFR1-3, TIE2), stromal (PDGFR- β , FGFR), and oncogenic kinases (KIT, RET, RAF). In preclinical models, regorafenib has shown a broad spectrum of antitumour activity. Regorafenib 160 mg once daily (o.d.) in repeating cycles of 3 weeks on/1 week off was determined as recommended dose for phase II/III. We report here data from a multicenter, open-label, Phase II safety study of regorafenib in patients with hepatocellular carcinoma (HCC) (ClinicalTrials.gov ID: NCT01003015, sponsored by Bayer).

Methods: From September 2009 to November 2010, patients (≥ 18 years old) with HCC who had radiological progression on prior first-line sorafenib treatment were enrolled. Other inclusion criteria were Child-Pugh class A, BCLC stage category A, B or C (not benefiting from established therapies), ECOG performance status 0-1, at least one naïve measurable lesion, and adequate bone marrow and organ function. Treatment consisted of regorafenib 160 mg once daily on a 3 weeks on/1 week off schedule. The primary objective of the study was safety evaluation, while the secondary included efficacy parameters, evaluated according to RECIST 1.0 and JNCI amendments in terms of the definition of progressive disease in HCC: time to progression (TTP), objective response rate (ORR), disease control rate (DCR) and overall survival (OS).

Results: Thirty-six patients (32 male, 4 female; median age 61 years [range 40-76]) have received ≥ 1 dose of regorafenib. Median duration of treatment was 15.5 weeks (range 2-36.0). Common treatment-related adverse events (AEs) ($\geq 20\%$ of patients, all grades) were hand-foot skin reaction (HFSR) 50%, diarrhea 50%, fatigue 47%, hypothyroidism 36%, anorexia 33%, hypertension 31%, nausea 31%, voice changes 25%, and constipation 22%. Grade 3/4 treatment-related AEs ($\geq 5\%$ of patients) were HFSR 14% (all grade 3), fatigue 14%, diarrhea 6%, hyperbilirubinemia 6% and hypophosphatemia 6%. All patients were evaluable for efficacy. Stable disease has been observed in 25 patients (69%) and a confirmed partial response in 1 (3%) patient. At the data cut-off, median time to progression was 127 days. Fifteen patients remain on treatment.

Conclusions: These data indicate that regorafenib can be administered safely in patients with HCC who have progressed on first-line sorafenib. Preliminary efficacy data indicate promising antitumour activity in this patient population.

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POSTER

Investigating Potential Biomarkers for Survival With Erlotinib in Patients With Advanced Pancreatic Cancer – Results of the Phase II BO21129 Study

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Introduction: Erlotinib is a human epidermal growth factor receptor (EGFR)-targeted agent that in combination with first-line gemcitabine significantly improves progression-free and overall survival (PFS; OS) in pts with advanced pancreatic cancer (Moore et al, 2007). The BO21129 study (sponsor F. Hoffmann-La Roche; ClinicalTrials.gov: NCT00674973) investigated whether patients (pts) with advanced pancreatic cancer likely to benefit from erlotinib therapy can be identified by clinical or molecular biomarkers.

Methods: This randomised, placebo-controlled, phase II study enrolled pts with histologically/cytologically confirmed, unresectable, locally advanced or metastatic pancreatic cancer, with ECOG performance status (PS) 0-2 who had failed or were unsuitable for first-line chemotherapy. Pts received placebo or daily oral erlotinib (150 mg) until disease progression with further treatment permitted (including erlotinib for the placebo arm). Primary endpoint was the identification of biomarkers for improved PFS with erlotinib. Other endpoints were OS, response rate, disease control rate (DCR) and adverse events (AEs). Data cut-off was 6 months from last pt randomised; results were stratified by ECOG PS, region and smoking status, and analysed by log-rank test.

Results: Baseline characteristics in the overall population ($n=207$), and by biomarker status and stratification factor, were similar between arms; the population had a poor prognosis (16% of pts had PS 2) and $>50\%$ of pts in the placebo arm received erlotinib on disease progression. PFS in the erlotinib and placebo arms (non-stratified primary analysis) was not significantly different (6.1 weeks and 5.9 weeks, respectively; $p=0.1909$). No stratification factor or biomarker (of the 4 initially assessed: EGFR protein expression, EGFR gene copy number, KRAS mutation and EGFR mutation) predicted improved PFS with erlotinib. DCR improved with erlotinib, but this was not statistically significant. OS was not significantly different between the arms. The number of pts with ≥ 1 AE (mainly mild/moderate) was higher with erlotinib than placebo (86.5% vs 68.9%, respectively).

Conclusion: So far, of those studied, no stratification factor or biomarker predictive of improved PFS with erlotinib has been identified in pts with advanced pancreatic cancer. The safety profile of erlotinib in this poor prognosis population was manageable and similar to prior studies.