Cetuximab in combination with weekly 5-fluorouracil/folinic acid and oxaliplatin (FUFOX) in untreated patients with advanced colorectal cancer: a phase Ib/II study of the AIO GI Group.

BACKGROUND: This two-part phase Ib/II study investigated the feasibility of administering cetuximab in combination with oxaliplatin and infusional 5-fluorouracil (5-FU)/folinic acid (FA) in a weekly schedule (AIO FUFOX protocol) as first-line treatment in patients with epidermal growth factor receptor-detectable advanced colorectal cancer.

PATIENTS AND METHODS: Cetuximab was administered weekly: 400 mg/m$^2$ initial dose, then 250 mg/m$^2$ and FUFOX: oxaliplatin 50 mg/m$^2$, FA 500 mg/m$^2$ and 5-FU as a 24-h infusion at either 1500 or 2000 mg/m$^2$ administered for 4 weeks followed by a 1-week rest (one cycle). RESULTS: Dose-limiting toxicity (grade 3 diarrhea) occurred in 3 of 14 assessable patients receiving 5-FU at standard 2000 mg/m$^2$. This dose was administered to a further 25 patients. Cetuximab combined with FUFOX was generally well tolerated with the most common grade 3/4 adverse events being diarrhea (27%) and paresthesia (16%). The confirmed response rate for patients receiving 5-FU at standard 2000 mg/m$^2$ (N = 41) was 56%, with a median duration of 9.3 months. Median progression-free and overall survival times including all 49 patients were 8.1 (95% confidence interval 6.0-9.7) and 28.2 months, respectively.
Cetuximab pharmacokinetics seemed not to be different for combination with FUFOX compared with cetuximab/irinotecan combinations. CONCLUSION: This protocol is well tolerated and shows promising efficacy supporting further investigation.