Combination Chemotherapy of Oxaliplatin, 5-Fluorouracil, Leucovorin in 5-Fluorouracil-Pretreated Patients with Metastatic Colorectal Cancer

Background To evaluate the efficacy and toxicity of oxaliplatin in combination with 5-fluorouracil (5-FU) and leucovorin (LV) in patients with metastatic colorectal cancer who previously treated with 5-FU-based chemotherapy.

Methods Between April 1999 and January 2001, thirty-two patients were enrolled. Oxaliplatin 130mg/m² intravenously (IV) on day 1 and 5-FU 500mg/m² IV on day 1 followed by continuous infusion of 5-FU 3,000mg/m² and LV 100mg/m² for 48 hours were given every 3 weeks. Six patients had received 5-FU as adjuvant setting and 26 patients as palliative regimen.

Results The median age of the patients was 50 years (range; 19-69) and dominant sites of metastasis were liver, lung or both in 9, 5 and 2 patients respectively. In evaluable 30 patients, overall response rate was 27% including 1 complete response and 7 partial responses. Median response duration was 28 weeks (95% confidence interval; 22-34 weeks) and median progression free survival of total patients was 24 weeks (95% confidence interval; 15-33 weeks). Median 5 cycles (range; 2-9) and total 155 cycles were performed in 32 patients. 150 cycles were evaluable for toxicity. The most common hematologic toxicity was grade 1-2 anemia in 78 cycles (52%). Leukopenia (39%) and thrombocytopenia (23%) were fully reversible. The most common non-hematologic toxicity was nausea/vomiting (43/30%) followed by diarrhea (23%), hepatotoxicity (21%) and neurotoxicity (21%). One patient ceased therapy due to grade 4 diarrhea. No other severe toxicity interrupted this treatment.

Conclusion Oxaliplatin, 5-FU and LV combination showed significant activity in previously treated metastatic colorectal cancer with favorable toxicity.