Irinotecan in combination with 5-fluorouracil and folinic acid or with cisplatin in patients with advanced gastric or esophageal-gastric junction adenocarcinoma: results of a randomized phase II study

Abstract:
Background: To identify the most effective of two combinations, irinotecan/5-fluorouracil (5-FU)/folinic acid (FA) and irinotecan/cisplatin, in the treatment of advanced gastric cancer, for investigation in a phase III trial. Patients and methods: Patients were randomized to receive irinotecan [80 mg/m² intravenously (i.v.)], FA (500 mg/m² i.v.) and a 22-h infusion of 5-FU (2000 mg/m² i.v.), weekly for 6 weeks with a 1-week rest, or irinotecan (200 mg/m² i.v.) and cisplatin (60 mg/m² i.v.), on day 1 for 3 weeks. Results: A total of 115 patients were eligible for analysis in the per-protocol population. The overall response rate in the irinotecan/5-FU/FA arm (n = 59) was 42.4%, with a complete response rate of 5.1%. Corresponding figures for the irinotecan/cisplatin arm (n = 56) were 32.1% and 1.8%, respectively. The median time to progression was 6.5 months (irinotecan/5-FU/FA) and 4.2 months (irinotecan/cisplatin) (P<0.0001), with median survival times of 10.7 and 6.9 months, respectively (P=0.0018). The major toxicity was grade 3/4 neutropenia, which was more pronounced with irinotecan/cisplatin than with irinotecan/5-FU/FA (65.7% versus 27%). Diarrhea was the main grade 3/4 non-hematological toxicity with both irinotecan/5-FU/FA (27.0%) and
irinotecan/cisplatin (18.1%). Conclusions: Both combinations were active, with acceptable safety profiles. Irinotecan/5-FU/FA was selected as the most effective combination for investigation in a phase III trial in advanced gastric cancer.