First-line irinotecan combined with 5-fluorouracil and leucovorin for high-grade metastatic gastrointestinal neuroendocrine carcinoma

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ABSTRACT

Aim and background. High-grade gastrointestinal neuroendocrine neoplasms, ie, poorly differentiated neuroendocrine carcinomas, with no effective therapeutic approaches, have a high ability to metastasize.

Methods. A review of the hospital information system was performed. Patients with histologically proven gastrointestinal neuroendocrine carcinoma who were treated with irinotecan combined with 5-fluorouracil and leucovorin in a first-line setting were eligible for analysis. We extracted information on age, sex, disease stage, laboratory findings, radiological findings, pathological findings, chemotherapy, effectiveness and adverse events of therapy, and outcomes.

Results. Eleven patients were included in the study. Partial response was observed in 7 patients. Median progression-free survival and overall survival were 6.5 (95% CI, 5.1-7.9) and 13.0 (95% CI, 9.8-16.2) months, respectively. No treatment-related deaths occurred.

Conclusions. The results demonstrated that irinotecan combined with 5-fluorouracil and leucovorin is an active regimen with acceptable toxicity for patients with metastatic high-grade gastrointestinal neuroendocrine carcinoma that merits further investigation in prospective trials.

Key words: chemotherapy, gastrointestinal, neuroendocrine carcinoma, neuroendocrine neoplasm.