Gemcitabine and cisplatin treatment of advanced-stage non-small-cell lung cancer in patients given cisplatin on day 8

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ABSTRACT

Aims and background. Gemcitabine and cisplatin treatment were administered to patients with advanced-stage, non-small-cell lung cancer. During phase II studies, the treatment is performed using a 28-day cycle, with gemcitabine administered on days 1, 8, and 15. Although it is advised that cisplatin not be administered on the first day, gemcitabine and cisplatin treatment is usually performed using a 21-day cycle, with gemcitabine administered on days 1 and 8, and cisplatin is given on the first day in most phase III studies. In contrast with previous phase III studies, cisplatin was administered on day 8 in our study. Dose density, drug toxicity, and efficacy were analyzed.

Methods and study design. Chemonaive patients with stage IIIB or stage IV non-small-cell lung cancer received gemcitabine (1250 mg/m²) on days 1 and 8 plus cisplatin (75 mg/m²) on day 8 every 3 weeks (1 cycle contained 2 applications).

Results. Sixty-seven patients received a total of 293 applications. Dose densities were 92.3% for gemcitabine and 93.9% for cisplatin. The types and rates of grade 3 and grade 4 hematologic toxicities were anemia (6%), granulocytopenia (46%), and thrombocytopenia (6%). Complete remission was seen in 2 patients (3%); partial remission was 40%, stable disease was 39%, and progression of disease, 10%. The median overall survival time was 13 months. The median progression-free survival time was 9.5 months. One-year survival rate was 54% and 2-year survival, 10.4%.

Conclusions. In this 21-day treatment regimen, overall survival was longer than 1 year and the 1-year survival rate was more than 50%. Both the severity and rate of observed thrombocytopenia in the study were very low. Other adverse effects in the current study were comparable to those reported in the literature.

Key words: cisplatin, gemcitabine, non-small-cell lung cancer.

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