A feasibility study of zoledronic acid combined with carboplatin/nedaplatin plus paclitaxel in patients with non-small cell lung cancer with bone metastases

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ABSTRACT

Aims and background. Although zoledronic acid (ZOL) has been reported to inhibit bone metastasis from lung cancer, the optimum chemotherapy regimen in combination with ZOL has not yet been determined.

Methods and study design. Eighteen patients having non-small cell lung cancer (NSCLC) with bone metastasis who received carboplatin/nedaplatin plus paclitaxel combined with ZOL (4 mg every 28 days) were enrolled to investigate the feasibility of this treatment. The efficacy was evaluated by the percentage of patients at 9 months who were receiving radiation therapy, the time to first radiation treatment, and quality of life. Adverse effects were also evaluated.

Results. Only 3 among 18 patients received radiation therapy for bone metastases during the 9 months of the study. ZOL seems to prolong the median time to the first radiation treatment and maintain the quality of life regarding pain and activity status. No patients discontinued the treatment, although grade 3 or 4 treatment-related adverse effects occurred in 8 patients.

Conclusions. ZOL combined with carboplatin/nedaplatin plus paclitaxel is an effective and tolerable treatment for NSCLC with bone metastases.

Key words: zoledronic acid, nonsmall cell lung cancer, bone metastasis, chemotherapy.

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