



A retrospective analysis of the outcome of patients who have received two prior chemotherapy regimens including platinum and docetaxel for recurrent non-small-cell lung cancer

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Abstract

With the availability of chemotherapy agents for first- and second-line treatment of advanced non-small-cell lung cancer (NSCLC), the patient population that requires subsequent chemotherapy is increasing. This retrospective analysis was performed to describe the clinical course after two standard or approved chemotherapy agents in patients with good overall performance status. Data were selected from patients with advanced NSCLC who had received third- or fourth-line chemotherapy after two prior chemotherapy regimens that included platinum and docetaxel given concurrently or sequentially. Prior regimens had failed due to disease progression within 90 days of chemotherapy, or unacceptable toxicity. Examination of over 700 patient records between January 1993 and January 2000 at one US and one European cancer centre revealed 43 patients that fulfilled the inclusion criteria. Response rates decreased with each line of treatment: first line, 20.9%; second line, 16.3%; third line, 2.3%; and fourth line, 0%. The disease control rate (response plus stable disease) also decreased dramatically from first- to fourth-line treatment, although it was higher for second-line treatment (74.4%) than for first-line treatment (62.8%). The median overall survival time from diagnosis was 16.4 months. The median overall survival time from the start of the last treatment (either third or fourth line) was 4 months. Patients with stage III disease at diagnosis had a longer overall survival from diagnosis than patients with stage IV disease ($P=0.02$). This review highlights the need for novel therapy approaches for patients with recurrent NSCLC who have failed second-line therapy and provides a baseline for the statistical design of such studies.