

## **A retrospective analysis of the efficacy of more than third line chemotherapy**

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**Background & purpose :** Platinum-based doublet chemotherapy as a first-line and docetaxel as a second-line chemotherapy are recognized as a standard therapy in advanced non-small cell lung cancer(NSCLC). But the patients who failed with second line chemotherapy have few options. Variable regimens as a second-line chemotherapy were performed after platinum-based first chemotherapy in many centers in Korea. But there was few reports about these analysis.

Here, we present a retrospective analysis of our institution's experience of patients with advanced NSCLC who received more than third line chemotherapy after two prior chemotherapy regimens.

**Methods:** A retrospective analysis of the NSCLC database at Holy Family Hospital in Bucheon, Korea was undertaken. All patient records between January 1999 and December 2008 were selected from patients who had received third- or more-line chemotherapy after two prior chemotherapy regimens. Primary outcomes assessed were clinical demographics and response rate and secondary outcomes were overall survival and time to progression(TTP).

**Results:** Among the examination of over 146 patient records who received with at least one chemotherapy regimen, 39 and 16 patients received third-line and forth-line chemotherapy respectively. Nine patients were received more than 5th chemotherapy regimens. Response rates decreased with each line of treatment until third-line treatment, but after that the RR was increased : first line, 24.7%; second line, 10.7%; third line, 10.3%; and more than fourth line, 12.5% and the disease control rate (response plus stable disease) also showed similar pattern from first- to more than fourth-line treatment (46.6; 29.3; 17.9; 18.8; 44.4). The median overall survival time from diagnosis was 7.7 months : second-line, 11.2m; third-line, 13.4m; more than fourth-line, 12.0 m.

**Conclusion:** This analysis showed that more active chemotherapy for patients with advanced NSCLC who have chance to receive chemotherapy will increase the response rate and overall survival.