in the young age group. The ratio of dose reduction of the first-cycle in initial chemotherapy were 14.8% in the young age group and 55.9% in the old age group(p<0.001). Despite lower dose-intensity of chemotherapy, median overall survival of the old age group was similar to that of the young age group(12.6 vs. 13.9 months, p=0.3471). Among the old age group, the average of number of regimens(2.22 of elderly patients without comorbidity vs. 2.39 of those with comorbidity, respectively; p=0.454) and cycles(8.04 vs. 9.84, p=0.105) per head were similar between elderly patients without comorbidity and with comorbidity. There was no significant difference in median overall survival between elderly patients without comorbidity and with comorbidity(11.2 vs 14.8 months, p=0.3054). Elderly patients with dose-reduction of the first-cycle in the initial chemotherapy received significantly less number of regimens(2.09 of elderly patients with dose-reduction vs. 2.62 of those without dose-reduction, p=0.017) and cycles of chemotherapy(7.79 vs. 10.58, p=0.016) as compared with elderly patients without dose-reduction. Although elderly patients with dose-reduction received less number of regimens and cycles of chemotherapy, median overall survival of elderly patients with dose-reduction was equivalent to that of elderly patients without dose-reduction(11.2 vs. 14.8 months, p=0.0742).

Conclusions: Although significantly lower dose-intensity of chemotherapies were conducted in elderly patients with advanced or recurrent NSCLC, the efficacy and survival of elderly patients were similar to those of young patients. The optimal dose and schedule of palliative chemotherapy for elderly patients with advanced or recurrent NSCLC should be redefined.

P2-268 **NSCLC: Cytotoxic Chemotherapy Posters, Tue, Sept 4**

Retrospective analysis of diffuse pulmonary infiltrations developed during or after chemotherapy in patients with lung cancer

Kim, Y. K. Kim, S. C. Kim, S. J. Ko, Y. H.; Kang, J. H. Park, H. J. Yoo, I. R. Kim, Y. S. Lee, K. Y. Wang, Y. P. Park, S. H.

The Catholic University of Korea, Seoul, Korea

Background: During anti-cancer chemotherapy for lung cancer and other various malignancies, some patients suffer due to sudden onset of dyspnea and acute respiratory failure with acute lung injury, diagnosed by chest CT and clinical findings. It is difficult to make an immediate differential diagnosis of chemotherapy induced acute lung injury and other causes of acute lung injury, such as respiratory infection or sepsis.

Methods: We analyzed the clinical and laboratory characteristics, causative chemotherapeutic drugs, treatment responses of suspicious chemotherapeutic drug induced acute lung injury retrospectively.

Results: Fourteen patients with lung cancer and two cases of other cancer (esophageal and breast cancer) were included. The probable causative chemotherapeutic drugs were gefitinib (5 cases), docetaxel (5 cases), paclitaxel (1 case), navelbine (2 cases), gemcitabine (1 case), epirubicin (1 case), and etoposide (1 case). The most frequent radiographic finding was ground glass attenuation detected in chest CT. Most of the patents were treated with broad spectrum antibiotics and steroid (methylprednisolone 125-250mg bid intravenously for 2-5 days or prednisolone 0.5-1mg/kg/day for 1-2 weeks) and mechanical ventilation if needed. Twelve patients were survived, but 3 patients died due to reparatory failure and accompanied complications. The APACHE II score was high in non-survivors (23) compared to survivors (14.5). The patients with combined respiratory infection confirmed by microbiological studies showed unfavorable treatment response. The patients with more severe initial respiratory dysfunction requiring mechanical ventilatory supports showed poor prognosis.

Conclusion: It is important to make an early diagnosis and early initiation of treatment for acute lung injury associated with anti-cancer chemotherapy.

P2-269 **NSCLC: Cytotoxic Chemotherapy Posters, Tue, Sept 4**

Prediction of response to gemcitabine with polymorphisms of RRM1 gene

Kim, Young-Chul[1] Kim, Soo-Ok[2] Kim, Kyu-Sik[3] Oh, In-Jae[4] Kim, Yu-Il[5] Lim, Sung-Chul[5] Park, Kyung-Ok[6] Lim, Jung-Hwan[7] Ju, Jin-Young[5] Cho, Gye-Jung[7] Chae, Don-Ryeol[5] Kim, Miran[5] Cho, Hyun-Ju[7]

[1] Chonnam National University Medical School Hwasun Hospital, Hwasungun, Korea [2] Gwangju Miraero21 Hospital, Gwangju, Korea [3] Chonnam National University Medical School, Hwasungun, Korea [4] Chonnam National University Hwasun Hospital, Hwasun, Korea [5] Chonnam National University Medical School, Gwangju, Korea [6] Gwangju Ilgok Hospital, Gwangju, Korea [7] Chonnam National University Medical School, Hwasun, Korea

Background: RRM1 is related to the resistance for gemcitabine chemotherapy in patients who revealed high RRM1 expression in tumor tissues. This study was designed under the hypothesis that the polymorphism in RRM1 promoter, which regulate RRM1 gene expression, could impact on the result of the therapeutic response and the prognosis of the patients with lung cancer treated with gemcitabine.

Methods: A retrospective data set of 97 patients with advanced NSCLC treated with gemcitabine as the first-line chemotherapy was studied. Allelotyping of RRM1 gene was performed with real-time PCR and sequencing using genomic DNA achieved from peripheral white blood cells.

Results: The frequencies of RRM1 gene promoter allelotypes were RR37CC-R524TT in 58, RR37AC-RR524CT in 29, and others in 10. The response rate for gemcitabine containing chemotherapy was 49.5%. When the author analyzed the therapeutic responses according to RRM1 promoter allelotypes, 65.5% in RR37AC-RR524CT group and 43.1% in RR37CC-RR524TT group (P = 0.049). There were no statistically significant differences in overall survival and progression free survival by the two allelotypes.

Conclusions: The response rate was higher in the patients' group with RR37AC-RR524CT in which we expected to show lower level of RRM1 gene expression than in the patients' group with RR37CC-RR524TT, and that result was thought to correspond to our hypothesis. If further studies would verify and supplement the result of our study, we can expect to improve the prognosis of the advanced non-small cell lung cancer through the application of our result for the patient-tailored therapy.

P2-270 **NSCLC: Cytotoxic Chemotherapy Posters, Tue, Sept 4**

Docetaxel monotherapy in second-line treatment in pretreated advanced non-small cell lung cancer (NSCLC) patients

Ko, Yoon Ho; Lee, Kyo Young; Lee, Myung Ah; Hong, Yeong Seon; Lee, Kyung Shik; Kim, Yeon Sil; Kim, Young Kyoon; Wang, Young Pil; Kang, Jin Hyoung

Kangnam St. Mary's hospital, Catholic University, Seoul, Korea