Weekly Paclitaxel and Cisplatin with Concurrent Thoracic Radiotherapy for Locally Advanced Non-small Cell Lung Cancer (NSCLC)

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**Background** Paclitaxel shows favorable interaction with Cisplatin and good radiosensitizing effect in low concentration.

**Methods** We combined weekly low dose paclitaxel(40 mg/m\(^2\)) with weekly Cisplatin(20 mg/m\(^2\)) and simultaneous standard dose thoracic radiation for patients with locally advanced inoperable NSCLC. The radiotherapy was given in 1.8 Gy/day, 5 times a week for 8 weeks, to a total of 65 – 70 Gy. When the patients showed partial remission after chemoradiotherapy, they were given further 3 cycles of consolidation chemotherapy (Paclitaxel 135 mg/m\(^2\) and Cisplatin 60 mg/m\(^2\) every 4 weeks) or not as another randomized protocol.

**Results** Fifty one patients were enrolled in 2000. Patients’ characteristics included: ECOG performance status 0(2 patients), 1(47 patients) or 2(2 patients); Histology- squamous cell carcinoma 27, adenocarcinoma 15, and other non-small cell carcinoma 9; median age 60 years(35 – 72); Clinical stage IIIA 1 patient and IIIB 50 patients. The grade III/IV treatment related toxicities were follows; grade III neutropenia 3(6%), grade III infections(lung abscess) 2(4%), grade III esophagitis 3(6%) and grade III radiation pneumonitis 7(14%). Overall the regimen was well tolerated. Fourty patients(78%) showed partial remission, 5 patients(10%) showed stable disease, and 5 patients(10%) progressed after chemoradiotherapy. One patient(2%) could not be assessed. The median survival has not reached. One year actuarial survival was 66% and 1 year relapse free survival was 55%.

**Conclusion** This regimen of weekly Paclitaxel and Cisplatin with concurrent thoracic radiotherapy is active and shows promising results in locally advanced inoperable NSCLC.