

14 months). One patient awaits the evaluation scan after 10 vaccines. No objective responses were achieved. One patient with progressive disease at inclusion obtained stable disease during the vaccination course after 6 and 10 vaccines. Preliminary immunological results suggest a correlation between the patients with stable disease and immunological response. At this time 13 of the 22 treated patients are still alive and 3 are still receiving monthly DC vaccines.

Conclusion: The production of individual vaccines is feasible and the administrations of the adjuvants are manageable. This treatment with tumor lysate pulsed DC's may have a stabilizing effect on patients with NSCLC and could form a basis for future research.

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POSTER

Indication of surgery for patients with clinical M1 lung cancer

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Background: Usually, surgery is not indicated to treat the primary focus in patients with clinical M1 lung cancer. Some M1 patients achieve prolonged survival, although this is rare. This study was conducted to examine the indication of surgery.

Material and Methods: Of 1,334 patients who underwent total resection of the primary pulmonary focus in our hospital between October 1986 and July 2007, we retrospectively investigated information on treatment for M1 lung cancer, relapse, and prognosis in 11 (0.8%) clinical M1 patients except pulmonary metastasis.

Results: Of the 11 patients, brain metastasis was detected in 6, adrenal gland metastasis in 3, and bone metastasis in 2. Concerning the clinicopathological background of 11 patients, they consisted of 7 males and 4 females, and 8, 1, 1, and 1 patients had adenocarcinoma, squamous cell carcinoma, large cell carcinoma, and atypical carcinoid, respectively. We reviewed the prognosis in the 11 patients. The 5-year survival rate was 34%, and the median survival time (MST) was 21 months. In 10 of the 11 patients, relapse was detected. The 5-year relapse-free survival rate was 18%, and the MST was 8 months. In 2 patient with adrenal gland metastasis, radiotherapy was performed. In 1 with adrenal gland metastasis and 2 with bone metastasis, surgery was conducted. However, these patients died of relapse. In 6 with brain metastasis, surgery or radiotherapy (with a g-knife) was performed. Of these, recurrent brain metastasis was detected in 4, and liver metastasis in 1. In the former, additional surgery or radiotherapy was selected. A complete response (CR) was achieved in 3 patients, and there has been no relapse. The 5-year and 10-year survival rate in the 6 patients with brain metastasis were equally 63%.

Conclusions: Therapies other than surgery may be appropriate when selecting a treatment for the primary pulmonary focus in clinical M1 cancer patients. However, in patients with brain metastasis alone, a favorable prognosis may be achieved by performing pulmonary surgery and treatment for brain metastasis. The results also suggest that, when a recurrent brain tumor is detected in clinical M1 brain metastasis patients, the positive treatment of recurrent brain metastasis prolongs survival.

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POSTER

Lung cancer screening with low dose spiral CT and autofluorescence bronchoscopy in high risk group

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Background: The best prognosis for lung cancer can be expected by diagnosis at an early stage of the disease. low dose spiral CT scanning is a good tool in detecting small pulmonary nodules, but not central airway lesions. Autofluorescence bronchoscopy can localize pre-malignant and early stage malignant lesions in the large central airways, but not lung parenchyme. We investigated the effectiveness of early detection of lung cancer with low dose spiral CT and autofluorescence bronchoscopy both in high risk group.

Methods: in this study, 136 participants (adult > 50 years old who had smoked at least 30 pack-years or lung cancer family history) underwent prevalence screening with LDCT and autofluorescence bronchoscopy from October 2006 through september 2008.

Results: The mean age of the patients was 61.74±7.5 years. smoking history were current smoke 100, ex-smoker 32, non-smoker 32, non-smoker 4, lung cancer family history 16. During the baseline screening stage 1a BAC 1, noncalcified SPNs 20, 2GO lesions were detected by LDCT screening, 6squamous metaplasia case, 1 hyperplasia case, 1 stage 0 lung cancer case, 1 carcinoma in situ case were detected by autofluorescence bronchoscopy.

Conclusion: screening with LDCT and autofluorescence bronchoscopy seems to be a promising method for screening early lung cancer in high risk group.

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POSTER

Short term (2-month) survival prognostication in newly-diagnosed patients with Non-Small Cell Lung Cancer

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Purpose: Accurate short-term prognosis is important in guiding therapeutic decisions but so far has been studied mainly in patients with end-stage disease. The aim of this study was to evaluate which baseline characteristics can accurately predict short-term (2-month) survival, in newly-diagnosed patients with metastatic Non Small Cell Lung Cancer (NSCLC) intended to receive first-line therapy.

Patients and Methods: One hundred one patients were studied on admission for the initiation of first-line chemotherapy. Patients' baseline demographic characteristics are depicted in the following table:

	N	%
	101	100
Males	90	89.1
Age [median (±SD)]	68 (±11.2)	
Current Smokers	78	77.2
Adenocarcinoma	58	57.4

The following clinical and laboratory parameters were recorded: sex, age, body mass index (BMI), performance status (PS), % weight loss, Mini Nutritional Assessment (MNA), smoking history, cardiovascular disease history, histologic subtype, number of metastatic sites, hemoglobin, white blood cell count, lymphocytes, platelets, albumin, calcium (levels corrected for albumin), LDH and C-reactive protein (CRP), interleukin 6 (IL-6) and interleukin 8 (IL-8) levels. A statistical analysis was then performed for the identification of the prognostic value of the aforementioned parameters.

Results: 15 patients (14.8%) died within 2 months after diagnosis. Of the studied parameters, PS, MNA, albumin, CRP, IL-6 and IL-8 were highly significant ($p < 0.01$), while hemoglobin and lymphocytes were significant ($p < 0.05$) predictors of 2-month survival.

Conclusion: Baseline characteristics could be used to predict short-term survival in newly diagnosed patients with NSCLC. This prediction may facilitate treatment decisions.

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POSTER

Gene expression profiles according to smoking status in early non-small cell lung cancer (NSCLC)

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Background: Approximately 10–15% of lung cancers occur in patients (pts) who never smoked. Characterization of NSCLC in non-smokers may allow better understanding of this entity and provide clues to new therapeutic targets.

Methods: Snap-frozen tumor samples from 48 NSCLC pts (42 women and 6 men; 27 non-smoking and 19 matched smoking pts) with corresponding normal lung tissue (NLT) samples from 15 and 10 pts, respectively were analyzed. Expression of 21 genes (including genes associated with smoking, kinases, growth factor receptors, transcription factors, genes indirectly involved in HPV infection pathways and others) was assessed by qRT-PCR. Reactions were carried out in microfluidic cards (TLDA) in HT7900 cyclor (Applied Biosystems). Gene expression was obtained by 2^{-ΔΔC_T} method with the raw expression data normalized against the expression of 18S, POLR2A and ESD. Statistical analysis used parametric test with Bonferroni correction for multiple comparisons.

Results: Five genes were significantly overexpressed in tumors from non-smokers vs. from smokers: aryl hydrocarbon receptor (AHR; $p = 0.001$), Ras-related associated with diabetes (RRAD; $p = 5 \times 10^{-3}$), colony stimulating factor for macrophages receptor (CSF1R; $p = 0.01$), receptor 2