

in 7 patients (28%), no change occurred in 9 patients (36%) and 9 patients (36%) had progressive disease. Hematologic toxicities were mild; only one grade 3/4 (WHO) neutropenia was observed. Grade 3/4 myalgia was observed in 3 patients, and grade 4 constipation in one patient, further appeared in 9 men impotence.

Conclusion, these results indicate that paclitaxel is an active new agent for the treatment of advanced NSCLC. Mild hematologic and nonhematologic toxicity's were observed with the 3-h Infusion. The firstly described appearance of impotence needs to be clarified in further investigations. The therapy was generally well tolerated.

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PUBLICATION

COMBINATION CHEMOTHERAPY INCLUDING IFOSFAMIDE, CARBOPLATIN, AND CISPLATIN IN ADVANCED NON-SMALL CELL LUNG CANCER (NSCLC)

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There is currently no standard chemotherapy regimen for treatment of non-resectable NSCLC. We evaluated a combination of Ifosfamide (IFX; 1500 mg/m² i.v. day 1-3), Carboplatin (CBDCA; 200 mg/m² i.v. day 1), and Cisplatin (CDDP; 50 mg/m² i.v. day 2-3), together with mesnuroprotection and hydration, every 4 weeks. Patients (pts) had histologically verified, previously untreated, measurable or evaluable non-resectable NSCLC, without brain metastases and with normal organ functions. 28 pts are currently included with the following characteristics: median age 48 years (range 38-67), WHO performance status (0: 32%, 1: 61%, 2: 7%), stage (Ia: 7%, IIb: 46%, IV: 46%), histology (squamous cell 21%, adenocarcinoma 42%, large cell carcinoma 21%, poorly differentiated NSCLC 14%). Results: Median no. of treatment courses were 3 (range 1-8). WHO grade 3-4 leucopenia occurred in 37% of pts and thrombocytopenia in 61% of pts. There were 2 cases with neutropenic fever (duration 2 and 3 days), and 6 cases with WHO grade 1-2 bleeding. There were no toxic deaths. Nausea/vomiting WHO grade 3-4 occurred in 25% in spite of premedication with Granisetron and Prednisolone. 6 partial and 3 complete responses have been recorded in this ongoing trial (response rate 32%). In conclusion, this regimen of IFX+CBDCA+CDDP is active in advanced NSCLC. The regimen is confined with hematologic toxicity, but the side effects are manageable.

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PUBLICATION

DETECTION OF HUMAN PAPILLOMAVIRUS DNA IN PRIMARY LUNG CARCINOMA BY NESTED POLYMERASE CHAIN REACTION

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Human papillomaviruses (HPV) have been implicated in the pathogenesis of human squamous cell carcinoma, especially of cervical carcinomas. In two previous studies concerning squamous cell carcinomas of the lung, DNA to HPV subtypes 6/11/16/18 (and 31/33/35 for one study) was detected by *in situ* hybridization in 7 to 30% of the cases. A series of 31 frozen biopsies of lung carcinomas were examined for the presence of HPV DNA by nested polymerase chain reaction (PCR). Primers for the two PCR were type-specific primers (6/11-16 and 18; kit Amplicis HPV*) for the transforming region of HPV. HPV DNA is found in two of 18 cases of squamous cell carcinoma (11%), in one of 4 cases of adenocarcinoma, and in two of 7 cases of neuro-endocrinal cancers. No case of the two large cell undifferentiated carcinomas was positive. There were three cases of HPV 6/11, one case of HPV 16, and one sample positive for HPV 6/11 and HPV 18. No morphologic changes consistent with HPV lesions were seen, and squamous metaplasia was observed only in squamous cell carcinomas. The frequency of 11% among the squamous cell carcinomas is near those found by previous studies, whereas PCR is theoretically more sensitive than *in situ* hybridization. HPVs have never been detected in adenocarcinomas or neuroendocrinal tumors, and this has to be confirmed by studies of many more cases. So HPV might play a role as promoter in carcinogenesis of any types of lung carcinoma, although at a low frequency.

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PUBLICATION

VINDesine-IFOSFAMIDE-PLATINUM (VIP) CHEMOTHERAPY IN PATIENTS WITH INOPERABLE STAGE III AND IV NON SMALL CELL LUNG CANCER. A PHASE II TRIAL

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Between Sept. 1991 and Oct. 1993, 64 patients were enrolled in this multicenter study in order to evaluate the toxicity and efficacy of a chemotherapy regimen, combining three active compounds while avoiding the pulmonary and other toxicity of mitomycin C.

Vindesine 3 mg/m² day 1 and 8, Ifosfamide 1200 mg/m² and Platinum 30 mg/m² day 1, 2 and 3 were given every 28 days. Response was evaluated each 2 courses, responders were continued until 6 courses.

Patients characteristics: mean age 57 y (37-70), histology squamous 19/adeno 16/large cell 8, metastatic disease in 27.

Responses in 59 patients evaluable for response were as follows:

	total	stage III	stage IV
CR	3 (5%)	2 (10%)	1 (3%)
PR	22 (37%)	9 (43%)	13 (34%)
SD	23 (39%)	6 (28%)	17 (45%)
PD	11 (19%)	4 (19%)	7 (18%)

WHO grade 3 & 4 toxicity scores were: anemia 6 pts, neutropenia 7 pts (4 gr. 4 infections), thrombopenia 5 pts, nausea 14 pts, alopecia 33 pts, neurotoxicity 3 pts and ototoxicity 1 pt. No > gr. 2 renal toxicity.

Conclusion: This VIP regimen is very active in this group of patients with moderate toxicity, and deserves further study as induction chemotherapy.

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PUBLICATION

A PHASE II STUDY OF PACLITAXEL IN PATIENTS WITH NON-SMALL CELL LUNG CANCER

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Paclitaxel is a product from the bark of *Taxus brevifolia* (Western Yew) with broad activities in various types of solid tumors. It has been used as second lined chemotherapy for advanced ovarian and breast cancer. We conducted a phase II study of paclitaxel as a single agent chemotherapy in Thai NSCLC patients. The treatment dosage and schedule are 200 mg/m² infusion over 24 hours every 21 days with dose adjustment according to toxicities. Dexamethasone, chlorpheniramine and cimetidine were given as prophylaxis regimens for allergic reactions and G-CSF was given for prophylaxis of neutropenia. Total patients enrolled in the study were 23. Nineteen patients were evaluated for tumor response and 23 for chemotherapy toxicities. Of all evaluable patients, 16 had no previous chemotherapy, 5 had prior radiotherapy, 5 had previous surgical resections. Median age was 54 (range 35-79). Male to female ratio was 1:1. Pretreatment performance status were 1 in 20 (87.0%) pts, 2 in 2 (8.7%) and 3 in 1 (4.3%). Histological diagnosis included adenocarcinoma 17 (73.9%), squamous cell carcinoma 5 (21.7%) and bronchoalveolar 1 (4.4%) pts. Severe toxicities, grade 3 to 4, were alopecia in 21 pts, neutropenia 11, anemia 3, anorexia 1, nausea/vomiting 2, diarrhea 2, myalgia 5. Febrile neutropenia occurred in 4 cycles of chemotherapy of patients who recovered without serious sequelae. Result of treatment were 6 (26.1%) PR, 4 (17.4%) SD, and 13 (56.5%) PD. Median time to response and duration of response were 8 weeks and 16 weeks respectively. Sites of response included soft tissue (1 pt), pulmonary (4 pts), mediastinal lymph node (1 pt), liver (1 pt), and bone (1 pt). Eight died from progressive disease, 4 are continuing treatment with paclitaxel and 11 patients switched to other treatments or best supportive care. Paclitaxel as a single agent chemotherapy is an active agent in advanced NSCLC patients.

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PUBLICATION

THE SURVIVAL BENEFIT OF MAINTENANCE THERAPY OF NSCLC PTS RESPONDING TO INITIAL TREATMENT. A RANDOMISED TRIAL

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NSCLC pts with inoperable disease responding to initial therapy usually fare better than those receiving only supportive care. The aim of this

study was to evaluate the role of maintenance therapy after induction chemotherapy (CT) and radiotherapy (RT). 74 pts with NSCLC, stage III–IV, already treated with 8 courses of CT plus RT of the primary site, entered the study. All pts have shown either PR or stable disease. 36 pts were randomly assigned to receive oral cyclophosphamide (CP) 100 mg/m²/day for 20 days, repeated every 30 days plus IFN- α -2a 3 MU/m² sq twice weekly, indefinitely (group A). The remaining pts received only supportive care (group B). Two pts in group A had to discontinue treatment because of side-effects and were evaluated as group B pts. Median survival was greater in group A (510 vs 360 days, $p < 0.01$) and this was also shown with survival analysis ($P = 0.005$). Hematological toxicity was higher in group A only for WBCs as were also constitutional symptoms. Results show that maintenance therapy with CP and IFN- α -2a confers a survival benefit to those NSCLC pts who have responded to initial therapy.

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PUBLICATION

PREOPERATIVE IRRADIATION PLUS CDDP FOR OPERABLE SQUAMOUS CELL LUNG CANCER*V. Zharkov, Yu. Demidchik, P. Moiseev**Cancer Research Institute, 223052, Minsk, Belarus*

One hundred and eighty one patients (pts) with proved squamous cell lung cancer were enrolled into randomized study of preoperative radiotherapy plus CDDP between December 1990 and December 1994. All the pts were males with median age of 56. 91 pts received preoperative radiotherapy (20 Gy total, 5 Gy per fraction a week) plus 20 mg CDDP 1 h before starting each radiotherapeutic procedure (the study group—SG). The total dose of CDDP before surgery was 80 mg. 90 pts underwent preoperative irradiation without chemotherapy (the control group—CG). 3 days after preoperative therapy all were operated on. Postoperative 30-days mortality was 3.3% for SG and 5.6% for CG. Four year survival was 46.5% and 39.7% respectively. In pN1 pts 4-year survival was 58.2% for SG and 41.1% for CG; in pT3–4 pts—49.1% in SG versus 25.4% in CG.