and 36%; median PS 1, 1 and 0. There were 2 toxic deaths, 12 treatment withdrawal (3 MVP, 6 PIN and 3 CaN) and 16 dose- or schedule-modification because of toxicity (6 MVP, 6 PIN 4 CaN). Grade 3–4 leukopenia occurred in 13.4%, 32.4% and 16.2%; grade 3–4; thrombocytopenia in 6.6%, 8.1% and 6.5% and grade 3 anaemia in 3.5%, 1.5% and 3.2% respectively. 6(MVP), 7(PIN) and 4(CaN) objective responses were independently validated. In conclusion both experimental navelbine-containing regimens under investigation are active and feasible in the treatment of advanced stage NSCLC.

1060 POSTER

CLINICAL APPLICATION OF POSITRON EMISSION TOMOGRAPHY FOR STAGING OF THORACIC LYMPHNODES

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Positron emission tomography (PET) is a new imaging modality which allows metabolic dependent visualisation of lesions. Due to the intense uptake of F-1 8 deoxyglucose (FDG), tumor as well as metastatic lymphnodes can be imaged with high contrast to the surrounding mediastinum and lung parenchyma. 29 patients with malignant thoracic tumors were studied prior to surgical staging. Staging was done according to the UICC and ATS. N-stages were compared among CT, PET and histopathological findings. For PET-classification, quantitative as well as morphologic information was used. Surgical staging was performed as lymph adenectomy (n = 14), exploratory surgery (n = 5), mediastinoscopy (n = 9) and autopsy (n = 1). The histology of the tumor was adeno carcinoma (n = 5), squamous (n = 8), small cell (n = 14), large cell (n = 1) and mixed tumor (n = 1). The resulting N-staging was N0 (n = 5), N1 (n = 1), N2 (n = 10), N3 (n = 11). The PET N-staging agreed in 18 patients with CT and disagreed in 11. It increased the N-stage in 5 and decreased it in 6 patients. In 4 patients the N2-stage was decreased to N0. In three patients the N-stage was increased to N3. The N-stage agreed in 27 of 29 patients with the surgical N-stage.

1061 POSTER

CANCER FAMILIARITY HAS NO PRACTICAL MEANING IN LUNG CANCER (LC) MANAGEMENT: RESULTS OF A LARGE PROSPECTIVE STUDY

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Old and consolidated experience indicate that the incidence of cancer is higher in certain families than in others. Cancer familiarity (i.e. number and type of cancers occurred in first degree relatives) was prospectively recorded from a series of 548 consecutive patients with a new primary LC. Other variables (in all, more than one hundred) included data from personal life style, clinical history, physical examination, laboratory evaluation, plus radiologic and pathologic tumor findings, and the subsequent clinical course. A second, third, and fourth case of LC within one family was declared by, respectively, 38, 3, and 1 patient; 125 and 32 others had (or had had) one or two relatives with a non-pulmonary cancer. In all, 190 (35% of the sample) had cancer familiarity. But one, no statistically significant difference (based on the χ-square and other nonparametric tests, such as the log rank test for survival differences) was observed between patients with or without cancer familiarity. Female patients showed a higher propeness to have other cancer-affected relatives than their male counter party ($P = 0.028$). The sex-related difference could be related to the lower tobacco, environmental, and professional carcinogenic exposure of females, which makes more important the role of endogenous factors. However, from the practical point of view of managing LC patients, cancer familiarity has no clinical value.

1062 POSTER

EVALUATION OF THE 4TH EDITION OF THE TNM CLASSIFICATION FOR LUNG CANCER AND PROPOSALS FOR THE 5TH EDITION

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The 4th edition of the TNM classification of lung cancer was presented in 1987. In 1992 a first revision and in 1993 a supplement containing recommendations fort the uniform use were published. The data of 5,333 patients were analysed prospectively to examine the prognostic impact of the recent TNM definitions and to make proposals for a 5th edition, planned in 1997.

The categories of the primary tumor (T) as well as the categories of lymph node involvement (N) satisfied all requirements for a prognosis-relevant classification. M1 should be subdivided into M1a for distant metastasis limited to the contralateral lung and into M1b for other distant metastasis ($P = 0.003$). Stage I should be subdivided into substages Ia for T1N0M0 and Ib for T2N0M0 ($P < 0.001$).

For stage III three substages could be recommended (IIIa: T3N0-1M0, IIIb: T4N0-1M0 and T1-2N2M0, IIIc: T3-4N2M0 and T1-4N3M0), P (IIIa vs. IIIb): <0.001, P (IIIb vs. IIIc): <0.001).

1063 POSTER

THE EFFECT OF CONTINUING SMOKING ON LATE RELAPSES AND SECOND PRIMARY CANCERS IN LONG-TERM SURVIVORS WITH SMALL-CELL LUNG CANCER (SCLC).

See page 22.

1064 POSTER

GEMCITABINE-CISPLATIN COMBINATION IN NON-SMALL CELL LUNG CANCER (NSCLC). A PHASE II STUDY

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The clinical efficacy and safety profile of a gemcitabine-cisplatin combination was investigated in a 12-centre phase II trial. 48 consecutive previously untreated NSCLC patients were entered. Median age was 60 years (range 37–70); performance status 0–1; 21 patients had locally advanced unresectable stage IIIb disease and 27 disseminated stage IV disease. Gemcitabine 1000 mg/m^2 was administered weekly (days 1, 8, 15) followed by one week rest and cisplatin 100 mg/m^2 monthly (day 2) of each 28-day cycle. This schedule was chosen because of experimental and clinical evidence of synergy when the 2 drugs are given in close sequence, and to assess separately acute side effects. Forty-six patients were evaluable for response and toxicity ($\geq$1 measurable lesion and $\geq$2 cycles). 1 complete response and 26 partial responses were observed for an overall response rate of 58% (95% CI 44–72%), 11 stage IIIb (52%, CI 31–73%) and 16 in stage IV (59%, CI 41–77%). Thrombocytopenia was the main side effect with 51% grade 3–4 toxicity, usually short-lived and responsible for the omission of gemcitabine administration on day 15 in 90 courses of chemotherapy, and no serious bleeding episodes. Non-haematological toxicity was usually mild with one acute but reversible renal failure. The combination of gemcitabine and cisplatin induced a significant response rate both in stage IIIb and IV NSCLC with modest side effects. The regimen deserves further careful evaluation in a phase III prospective randomized trial.

1065 POSTER

RESULTS OF A MULTIMODALITY PREOPERATIVE INDUCTION TREATMENT PROGRAM IN LOCALLY ADVANCED (LAD) NSCLC STAGES IIIA AND IIIB

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Since 3/91, 97 patients (pts) with LAD-NSCLC (mediastinoscopy obligatory) have been entered. Treatment consisted of 3 cycles cisplatin (P) (60 mg/m^2 d 1+7) and etoposide (E) (150 mg/m^2 d 3, 4, 5), q d 22 followed by one cycle simultaneously RTx/CTx (45 Gy, 1.5 Gy twice daily within 3 weeks; P 50 mg/m^2 d 2+9 of RTx, E 100 mg/m^2 d 4,5,6 of RTx) followed by remediastinoscopy and operation. 88 pts are currently off treatment.

Their characteristics: m/f 70/18; median age 55 (30–70); med. PS 1 (0–2): IIIa (more than 1 mediastinal lymph node station involved) 48, IIIb 40. *Results:* (n = 88 pts):

Stage	n	cOR n(%)	OP %	RO %	pCR	MST	3YSR
IIIA	48	29 (60)	33 (69)	29 (60)	13 (27)	18 mts	30%
IIIB	40	25 (63)	26 (65)	18 (45)	9 (23)	20 mts	37%
All pts	88	54 (61)	59 (67)	47 (53)	22 (25)	20 mts	33%