generated by multiple covariates and analysed on SPSS software (version 15.0; SPSS, Inc., Chicago, IL).
Results: Median age of the cohort was 60 years (range, 35−85) where 65(89%) were male, with 11 (15.1%) patients having SVCO at presentation. Karnofsky performance score (KPS) of <70 was seen in 22 (30.1%) patients at the time of registration. Squamous histology was seen in 16 (22%) while non squamous was established in 67 (78.1%) patients. Complete AJCC staging work up revealed stage II A (1 patient, 1.4%), II B (1, 1.4%), III A (21, 28.8%), III B (18, 24.7%) and IV (32, 43.8%). At presentation bone metastasis was seen in 16 (22%), and visceral metastasis in 9 (12.4%) patients. Upfront chemotherapy was infused in 50 (68.5%) patients while 73 (100%) received adjuvant radical radiation therapy to the primary lesion. None of the patients received any curative or palliative surgical intervention. Median OS of the population was 5 months (range,0−28 mths). Amongst the multiple covariates tested like age, sex, KPS, histology, AJCC stage, chemotherapy and radiation therapy parameters, only factors related to chemotherapy had shown a significant relation to OS. Superior median survival was seen in patients who received chemotherapy than otherwise (8.02±5.24 mths vs. 3.74±5.21 mths, p = 0.03). Partial responders to chemotherapy had better survival outcome than those with progressive disease during the course of chemotherapy ((9.45±5.4 mths vs.5.56±5.4 mths, p = 0.02).
Conclusions: Role of chemotherapy is well evident in the overall dismal outcome of lung cancer in our study. However, factors like patient preference and financial constraints do have an indirect effect in our set up on the application of chemotherapy. Similar effect is reflected for adoption of radical surgical approach which is glaringly lacking. Additionally, advanced stage presentation could be seen as a probable failure of adequate screening and early diagnosis. Overall, the concept of multidisciplinary approach towards lung cancer management needs to be rigidly followed.

9030 POSTER

An Expression Profile Classifies Early Stage Non-small Cell Lung Cancer Into Two Groups With Good and Poor Disease-free Survival Rates

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Introduction: In Spain, 20,000 new cases diagnosed annually of lung cancer. In this disease, the overall survival rate at 5 years is 14%. Of all patients diagnosed in early stages (I and II), 25−30% develop recurrence within 5 years. The aim of our study was to identify molecular subgroups with poor prognosis using gene expression profiles.
Materials and Methods: 84 surgically resected cases (with mediastinal lymph node dissection and negative margins) of stage I (n = 60) or II (n = 24) NSCLC from our institution (40 squamous cell carcinoma (SCC), 39 adenocarcinomas, 3 adenosquamous and 2 large cell), without previous tumours and without neoadjuvant or adjuvant therapy. Recurrence rate was 34.5%. RNA was extracted from frozen samples with more than 70% tumour cells. Tumours were analyzed using microarray expression 4x44 K (Agilent). The data were normalized (LOWESS) and subjected to unsupervised analysis (clustering and k-means) to classify samples based on expression profiles. The association of identified molecular subgroups with clinicopathological (age, sex, smoking, stage, differentiation, inflammation, . . .), molecular variables (mutations of EGFR, k-Ras and B-Raf) and disease free survival (DFS) was analyzed. An external dataset was used to validate our molecular classification.
Results: In our series, neither the histological subtype nor tumour stage was associated with DFS. We have identified two molecular subgroups of NSCLC whose Kaplan–Meier curves show a statistically significant association with DFS (Log-rank test p = 0.004). The better prognosis subgroup includes one third of patients with both adenocarcinomas and SCC, stage I and II. Moreover, pathway analysis points out to a key role of the immune system in the prognosis value of molecular groups. A predictor was obtained to classify samples into low and high risk groups. Prognostic value of the classifier was validated in an external series of 162 patients (p = 0.001). Predictor was associated with DFS independently of the stage.
Conclusions: In our series, classical histopathological subtypes and tumour stage did not show statistical significant associations with DFS while our expression profile subtypes did. This association was confirmed in an external dataset. This classification could allow selecting patients at low risk of recurrence of patients who may require adjuvant treatment in addition to surgery.

9031 POSTER

Does the "Two Week-Wait" Target Improve Survival in Patients With Lung Cancer in the UK?

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Backround: Incidence and mortality rates for men have fallen sharply since peaking in 1974. Incidence of lung cancer has risen by 76 per cent for women between 1971 and 2000, while mortality rates are falling slightly after peaking in 1994. Lung cancer 5-year survival rates are poor and have been largely static over time. Cancer waiting time targets were introduced to monitor service performance via process improvement. The intention was to improve the outcome (survival) of the disease. The aim of the study was to assess whether the "two week-wait" target can improve survival in patients with lung cancer.
Materials and Methods: 753 patients were diagnosed with lung cancer between January 2002 and December 2006. Data were retrospectively collected from the cancer database at Queen Elizabeth Hospital, London. Survival was compared in patients that were referred via the "two week-wait" rule (Group 1) and those not referred via this pathway (Group 2).
Results: Only 27% of patients were referred under the "two week-wait" rule and of the remainder a significant proportion came from the Accident & Emergency (A&E) or referred from other specialities (221 and 188 patients respectively).
Kaplan–Meier comparison showed survival to be 16% for Group 1 and 9% for Group 2.
The mean survival for lung cancer patients referred via the "two week-wait" route is 0.82 years (301 days, 95% confidence interval, 246–356 days) and the same for patients referred via non two-week route which was 0.41 years (134 days, 95% confidence interval 108–260 days), (p value $\leqslant$0.005).
Conclusions: The "two week-wait" rule significantly improves the survival in patients with lung cancer. However the underutilisation of two week route cannot be ignored as an unacceptably high percentage of lung cancer patients come via A&E (40%) and other specialities (36%).

9032 POSTER

A Feasibility Study of Induction Pemetrexed Plus Cisplatin Followed by Extrapleural Pneumonectomy (EPP) and Postoperative Hemithoracic Radiation (H-RT) for Malignant Pleural Mesothelioma (MPM) − First All Japan Trial

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Background: Feasibility and efficacy of trimodality therapy for MPM is still under controversy mainly due to the lack of clinical evidence. In this context, a prospective multi-institutional study has been planned to evaluate the feasibility of trimodality therapy for MPM with support by the Special Coordination Funds for Promoting Science and Technology from the Japanese Ministry of Education, Culture, Sports, Science and Technology.
Methods: Eligibility criteria: a histologically confirmed diagnosis of MPM, including all subtypes clinical T0−3, N0−2, M0 disease considered to be completely resectable; no prior treatment with chemotherapy, surgery or radiotherapy for the disease; age between 20 and 75 years; ECOG performance status of 0 or 1; a predicted postoperative forced expiratory volume in 1 s of >1000 ml; adequate bone marrow, hepatic, renal, cardiac and respiratory functions; a life expectancy of >12 weeks; and written informed consent. Treatment methods: Induction chemotherapy of pemetrexed 500 mg/m^2 plus cisplatin 60 mg/m^2 with vitamin supplementation for 3 cycles, followed by EPP and postoperative H-RT (54 Gy). Primary endpoints: macroscopic complete resection rate by EPP and treatment-related mortality for trimodality therapy.
Results: A total of 17 institutions in Japan with certified specialists in oncology, surgery and radiation therapy participated in this trial. The study was initiated in May 2008 and patient enrollment was completed in November 2010 with 42 eligible patients. Median age 64.5 (range 43−74), M: F = 39:3, Clinical stage I:II:III = 14:13:15, Histological type epithelial: sarcomatous; biphasic; others = 28: 1: 9: 4. Of 42, 33 patients underwent surgery. Three patients received thoracotomy only due to extensive disease, and macroscopic complete resection with EPP was achieved in 30 patients (71% of ITT).