received an aprepitant triple-therapy regimen (aprepitant, ondansetron, and dexamethasone) or a control regimen (ondansetron and dexamethasone) administered orally. Primary and key secondary efficacy endpoints were proportions of patients with No Vomiting and Complete Response (no vomiting/no rescue medication use), respectively, during the 120 hours post-chemotherapy. Treatment group comparisons were based on a logistic regression model with terms for treatment, region, and gender. The proportions displayed for the lung cancer subgroups were not included in the model.
Results: Of 832 patients in the modified intent to treat population, 13% (n = 108) had lung cancer (compared to 43% in previous HEC studies). More patients in the aprepitant groups achieved No Vomiting and Complete Response overall (Table). Regardless of the level of emetogenicity, the antiemetic benefit of aprepitant addition was preserved in the subgroup of patients with lung cancer. Adverse events were generally similar in the aprepitant and control groups.
Conclusions: The aprepitant regimen provided superior efficacy over the control regimen for prevention of CINV for patients receiving HEC or MEC. The benefit of aprepitant triple therapy in patients with lung cancer appears to extend to MEC. Aprepitant was generally well tolerated.

Overall Phase (0−120 hr post-chemotherapy)

	MEC		HEC	
	Aprepitant n/m (%)	Control n/m (%)	Aprepitant n/m (%)	Control n/m (%)
No Vomiting				
All Tumors	324/425 (76.2)*	252/406 (62.1)	374/520 (71.9)*	260/523 (49.7)
Lung Ca	43/52 (82.7)	40/56 (71.4)	174/230 (75.7)	121/217 (55.8)
Complete Response				
All Tumors	292/425 (68.7)*	229/407 (56.3)	352/520 (67.7)*	250/523 (47.8)
Lung Ca	39/52 (75.0)	38/56 (67.9)	169/230 (73.5)	114/216 (52.8)

n/m = patients with favorable response/patients included in subgroup; *p-value < 0.05

9049 POSTER

Intron 8 polymorphism G/T of NFkB2 gene: risk factor for non small cell lung carcinoma

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Background: The members of the NFkB family are among the most important transcription factors in cancer. NFkB1 and the classical pathway have become objects of detailed research in the last years, although, little is known relating to the possible role of NFkB2 (alternative pathway of NFkB) in carcinogenesis. The aim of this study was to define the relation of the NFkB2 single nucleotide polymorphism rs7897947 with non small cell lung carcinoma (NSCLC).
Materials and Methods: We used 37 blood specimens and 89 paraffin-embedded tissue specimens from patients with NSCLC. We also used 129 blood specimens from healthy donors. DNA isolation was performed using the Qiagen DNA blood kit (blood specimens) and the QIAamp DNA FFPE Tissue (tissue-specimens). Samples were genotyped using real-time PCR.
Results: Approximately half of the healthy donors (49.6%) were TT homozygotes, 11.6% were GG homozygotes and 38.8% were GT heterozygotes. The corresponding percentages for the patients were 69%, 24.6% and 6.4%. The difference in allele frequencies between healthy controls and patients was statistically significant (p = 0.007). No correlation was found with age, sex, primary site, histological subtype, grade and maximum diameter. However, patients carrying a G allele had a lower frequency of positive lymph nodes.
Conclusions: The presence of the T allele seems to predispose to NSCLC development and might increase the possibility of lymph node metastatic spread. This study is ongoing and more patients and healthy control donors are currently being recruited to confirm these results.

9050 POSTER

NSCLC in never smokers, a different disease - a single institution retrospective evaluation

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Background: Although most lung cancers are a result of smoking, approximately 25% of lung cancer cases worldwide are not attributable to tobacco use, accounting for over 300,000 deaths each year. Striking differences in the epidemiological, clinical and molecular characteristics of lung cancers arising in never smokers versus smokers have been identified, suggesting that they are separate entities.
Material and Methods: We report the data of never smokers NSCLC patients (pts) of a single institution experience enrolled from July 2005 to December 2008. Genomic DNA was isolated from paraffin-embedded tumor specimens, amplified for *EGFR* (exons 18, 19, 20 and 21), *KRAS* (exon 2) by nested polymerase chain reaction and sequenced in both sense and antisense directions. RECIST criteria were used to assess response to treatment.
Results:51 of 250 (20.4%) pts with stage IIIB (12 pts) and IV (39 pts) NSCLC treated at our centre were never smokers. Median age was 61.7 years (range 31−84), F/M: 33/18, ECOG PS 0−1/2: 49/2, adeno/squamous/not otherwise specified NSCLC: 40/2/9. Nine of 34 pts (26.5%) evaluated were mutated at the *EGFR* gene: 5 in exon 19 (delE746-A750), 1 in exon 20 (dupl770 insASV) and 3 in exon 21(missense L858R). None of the *EGFR* mutated pts carried a *KRAS* mutation. 1 pt with *KRAS* mutation (G12V) did not responded to tyrosine kinase inhibitor (TKI) treatment. Brain metastases were diagnosed in 9 of 39 pts (23.1%) having stage IV disease with 6 of them being positive at diagnosis. All patients received first line treatment which has been a platinum-based doublet chemotherapy in 42 pts (82.4%), gemcitabine monochemotherapy in 6 pts (11.7%) and first-line (TKI) in 3 pts (5.9%). Response to first line chemotherapy was as follows: 18 (37.5%) stable disease (SD), 19 (39.5%) partial response (RP) and 11 (22.9%) progressive disease (PD). 39 of 51 pts (76.4%) received a small molecule TKI either as second or third line of treatment and 34 of them were evaluable for response. We observed complete response (RC) in 2 pts (5.8%), RP in 15 (44.1%), SD in 12 (35.2%), and PD in 5 (14.7%) with a disease control exceeding 80%. At a median follow-up of 18.5 months, 33.3% (17/51 pts) of the population died. Median estimated PFS was of 7.7 months (95% CI 4.1−11.3 months).
Conclusions: Our data appear to be in line with those that have previously been reported. Never-smokers in whom NSCLC develops are more likely to be young, female, and almost exclusively of adenocarcinoma histology. Never-smokers might have a better prognosis both in terms of PFS and OS respective to smokers NSCLC pts.

9051 POSTER

Reduction of under-reporting of occupational lung cancer (OLC) by lung tissue optical mineralogic analysis (LTOMA) associated to standardised questionnary(SQ) - about fifty-nine cases

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Rational: in France recognition of OLC is insufficient. LTOMA study for operated lung cancer is easy to realize and may contribute to reduce under-reporting.A level upon 1000 asbestos bodies (AB)/gr dry lung identify workers with a high probability of exposure to asbestos in the workplace. [1] The aim of our study is to evaluate OLC recognition level by LTOMA and SQ analysis in a retrospective series of lung cancers.
Patients and Methods: Between December 2004 and December 2008 among 440 new lung cancers cases, 59 patients (51 smokers or ex smokers, 48 males, 11 females, mean age: 63 years) underwent systematically pulmonary biopsy after resection (54) or during diagnostic biopsy by thoracotomy or thoracoscopy(5) for LTOMA. Specimen were digested (sodium hypochlorite) and collected on cellulose membrane filters (pore size: 0.45 μ), dried and fixed on glass slides by fusion in acetone vapors, transmitted and phase contrast light microscopy study (X200) counted: AB, uncoated fiber (UF) larger than 15 μm, ferruginous bodies on opaque particle (FBOP) and on nude particle (FBNP)/gr of dry lung. A SQ of French Pneumology and Occupational medecine societies was submitted to patients. Complete reply SQ was available only in 19/59 cases (32%). However principal occupational work was identified in 55/59 cases (93%).
Result: 10 cases (17%) presented with more 1000 AB/gr of dried lung, all with asbestos occupational exposure. 7 cases (11%) presented suspected professional asbestos exposure with absence elevated level of AB but for two cases high level UF (4284, 3415/gr of dry lung). 3 silicosis cases (5%) were identified with one non smoker with high level of FBOP (10,280/gr of dried lung) and with silicotic nodule on adenopathy. One (1.6%) non smoker handywoman case with two successive lung cancer and construction worker activities had high level dust and granulomatous lesions on adenopathy and a high level UF (1900/gr dry lung).
Discussion and Conclusion: 21/59 cases (35%) were probable OLC. Dumortier [2] reported in a retrospective study of 1931 cases, 13.3% AB level upon 1000/gr dried lung by LOTMA without data concerning SQ. Legrand Cattan [3] with a SQ identify 26% of 122 patients among 207 lung cancers for claiming a compensation. LOTMA combined with SQ is easy to realize and may contribute to reduce under reporting OLC.

References

[1] Henderson DW Pathology 2004;36:517−50