Conclusions: the combination of G plus P demonstrated to be very active and tolerable in TCC ushering us in the post-M-VAC era for TCC pts.

1406 POSTER

Combination chemotherapy with cis-platin (CDDP), epirubicin (EPI), and docetaxel (DOC) in transitional cell urothelial cancer (TCC). A phase II study

D. Pectasides, A. Visvikis, A. Aspropotamitis, A. Halikia, A. Kalantaridou,
S. Batzios, N. Karvounis, A. Athanassiou. 1st Dept. of Medical Oncology,
Metaxa's Memorial Cancer Hospital, Piraeus, Greece

Purpose: This study was conducted to evaluate the efficacy and toxicity of the combination of CDDP, EPI and DOC in locally advanced or metastatic urothelial TCC.

Methods: Thirty-two chemotherapy (CT) – naïve patients (pts) were treated with EPI 40 mg/m² I.V., DOC 75 mg/m² I.V. with standard oral steroids premedication and CDDP 75 mg/m² I.V. with pre and post-hydration. Treatment was repeated every 3 weeks. Pts were evaluated for toxicity weekly and assessed for response every 2 cycles of CT. Twenty-four pts had metastatic and 8 pts locally advanced disease. There were 6 female and 26 male with a median age of 65 y. The ECOG PS was 0 in 10 pts, 1 in 6. 2 in 2 and 3 in 4.

Results: There were 9 (30%) CRs (2, 28.5% in locally advanced and 7, 30.4% in metastatic disease) and 11 PRs (3, 42.8% and 8, 34.7%, respectively) with an ORR of 66.6% (71.4% and 65.2% respectively). The median duration of response in pts with metastatic disease was 8.5 mos and the overall Survival 14.5 mos (15 mos and 12.5 mos, respectively). Sixteen (53.3%) pts required a dose reduction and 5 (16.6%) 2 dose reductions. There were 4 episodes of febrile neutropenia and sepsis, which were successfully treated with broad spectrum antibiotics. There were no treatment delays due to myelotoxicity. G3/4 anemia and thrombocytopenia occurred in 12.5% and 9.3% of pts, respectively. G2 nephrotoxicity and G2/3 neurotoxicity occurred in 9.3% and 9.3% of pts, respectively. Alopecia was universal. G3/4 nausea/vomiting, G2/3 mucositis and G2/3 fluid retention and G2/4 allergy occurred in 9.3% and 9.3% of pts, respectively.

Conclusion: The combination of EPI, DOC and CDDP is an active regimen for urothelial TCC, The safety profile mainly consisted of neutropenia leading to dose reduction, but with no serious infectious complications.

1407 PUBLICATION

Occupational prostate cancer risk factors in an area of coal, iron, and steel industries in Germany

T. Bandel¹, T. Reckwitz², S. Dickhut¹, <u>P. Jedrusik</u>^{1,2}, W. Weistenhöfer¹, H.M. Bolt¹, H. Schulze², K. Golka¹. ¹Institute of Occupational Physiology at the University of Dortmund, Dortmund; ²Urological Department, Städtische Kliniken Dortmund, Dortmund, Germany

Aim of the study was to identify possible risk occupations for prostate cancer in the Ruhr-area, a former center of the German coal, iron, and steel industries

Methods: In 238 cases with histologically proven prostate cancer and of 414 controls with benign prostatic hyperplasia all occupations ever performed for more than 6 months and life time smoking habits of were asked for with a questionnaire. Confounder-adjusted odds ratios were estimated by Fisher's exact test and logistic regression analysis.

Results: Confounder-adjusted odds ratios for both age (OR 2.56) and duration of employment (OR 2.22) were elevated in underground hard coal miners. An elevated prostate cancer risk was also observed for painters/varnishers (OR 2.84 adjusted for age, OR 2.91 adjusted for duration of employment). Steelworkers showed no increased risk (OR 0.93 adjusted for age, OR 0.94 adjusted for duration of employment). Businessmen showed a remarkably low prostate cancer risk (OR 0.38 adjusted for age, OR 0.37 adjusted for duration of employment). No differences in the smoking habits described by pack years could be found between cases and controls.

Conclusion: Coal dust components and dietary factors due to high energy expenditure must be discussed as possible risk factors for prostate cancer in hard coal miners.

1408 PUBLICATION

Salivary biochemical and immunological profile following low-dose IL-2 based immunotherapy

R.M. Nagler¹, E. Gez², R. Rubinov², D. Laufer¹, H. Ben-Aryeh¹, D. Galitini³, M. Filatov¹, A. Kuten², ¹Oral Biochemistry Laboratory; ²Dept. of Oncology; ³Dept. of Diagnostic Radiology, Rambam Medical Center and Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel

Purpose: One of the side effects accompanying low-dose recombinant interleukin-2 [rlL-2]-based immunotherapy is salivary hypofunction. We evaluated the functional and compositional whole salivary profile at both resting and stimulated conditions in 10 renal cell carcinoma patients who received prolonged low-dose rlL-2-based immunotherapy.

Results: At three days following the termination of four weeks of the combined administration of rIL-2 and rIFN- α , 21% reduction of salivary flow rate $[\rho < 0.05]$ at resting condition was found, accompanied by significant multiple compositional alterations, including an increase in calcium, magnesium and phosphate concentrations by 65.6% $[\rho < 0.01]$, 50% $[\rho < 0.05]$ and 27% $[\rho < 0.05]$, respectively, and a 23.5% $[\rho < 0.05]$ reduction in the total protein concentration. In contrast, no flow rate reduction was noted under stimulated condition, and the only altered compositional component was the phosphate which was increased by 29.3% $[\rho < 0.05]$. The concentrations of all the other salivary components analyzed, including sodium, potassium, amylase, albumin, and the immunoglobulins, IgG, IgA and secretory IgA, were not effected by the immunotherapy. At one month following the termination of the immunotherapy, no functional or compositional salivary alterations were noted.

Conclusion: We recommend salivary-supporting therapies and anticariogenic treatments for patients undergoing low-dose rIL-2-based immunotherapy.

1409 PUBLICATION

Immunohistochemical evaluation of the apoptotic markers Bcl2, Par-4 and p53, VEGF receptor Flk-1 and correlation with clinicopathological parameters in localised prostate adenocarcinomas

A. Giannopoulos¹, <u>L. Nakopoulou</u>², E. Serafetinides¹, H. Gakiopoulou², A. Rashdan¹, A. Zervas¹, M. Giannopoulou¹, C. Dimopoulos¹. ¹Athens Medical School, University of Athens, Urology, Athens; ²Athens Medical School, University of Athens, Pathology, Athens, Greece

Purpose: Oncogenic protein Bcl2 expression is a key event in apoptosis while mutant p53 protein plays also an important role as it regulates expression of Bcl2. Prostate apoptosis response-4 (PAR-4) is specifically expressed by cells entering apoptosis. Flk-1 represents a high affinity receptor for vascular endothelial growth factor. In a retrospective study we evaluated the expression of the former markers in a cohort of 37 surgical specimens of localised prostate adenocarcinomas and the possible relationship with PSA, grade and stage.

Methods: Thirty seven formalin-fixed paraffin-embedded archival prostate cancer specimens were examined by immunohistochemistry with respect to apoptotic markers and Flk. Preoperative serum PSA, grade and pathological stage were included in statistical analysis.

Results: The expression of Par-4 and Flk-1 in malignant and normal prostatic tissue was inverse. No relation was found in expression of these markers with PSA, grade and stage. An inverse relation between p53 and Bcl2 expression with PSA was noted (p = 0.0006 and p = 0.008 respectively). Bcl2 expression in malignant tissue correlates with grade (p = 0.044) and stage (p = 0.06) of disease.

Conclusion: Bcl2 expression is considered an independent prognostic marker in early prostate cancer while corellation of the other markers needs further research.

1410 PUBLICATION

Gemcitabine and paclitaxel in previously treated patients with advanced transitional cell carcinoma

L. Marini¹, C. Sternberg¹, A. Sella², F. Calabrò¹, A. Van Rijn¹. ¹San Raffaele Scientific Institute, Medical Oncology, Rome, Italy; ²Rabin Medical Center, Medical Oncology, Petah Tikvah, Israel

Second-line therapy is needed for patients (pts) with transitional cell carcinoma (TCC) who fail first-line M-VAC chemotherapy. Both Gemcitabine (G) and Paclitaxel (T) have demonstrated activity in TCC. Based upon the results of an Q 2 week G + T schedule (Ann Oncol 1998; 9: 733–738), 18