and type (p = 0.8). Higher GGT levels were found in advanced tumour stages (FIGO I *vs.* II *vs.* III *vs.* IV, p = 0.002). High-risk GGT group affiliation (p = 0.01 and p < 0.0001) was associated with impaired disease-free and overall survival in a univariate analysis, but not in a multivariable regression model (p = 0.7 and p = 0.3) (Table 1). We further investigated the association between prognosis and GGT and observed a linear correlation between GGT and prognosis. Therefore we were not able to identify a clear prognostic cut-off value for GGT in patients with cervical cancer.
Conclusion: High GGT − a marker for apoptosis and cervical cancer risk − is associated with advanced tumour stage in patients with cervical cancer.

8042 POSTER

Nuclear Y-box Binding Protein-1 Expression, a Predictive Marker of Prognosis, Is Correlated With Activated Signal Transducer and Activator of Transcription-3 Expression and Survival in Cervical Squamous-cell Carcinoma

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Background: The Y-box binding protein-1 (YB-1) is a member of the cold shock protein family and functions in transcription and translation. Many reports indicate that YB-1 is highly expressed in tumour cells and is marker for tumour aggressiveness and clinical prognosis. The potential role of activated signal transducer and activator of transcription-3 (STAT3) was pursued to address the underlying mechanism for YB-1-mediated survival. We have previously reported that STAT3 expression in cervical squamous-cell carcinoma acts as predictor of poor prognosis. Here, we examined whether nuclear YB-1 expression is associated with STAT3 expression and survival.
Materials and Methods: The immunohistochemical analysis of nuclear YB-1 expression was performed on tissues from 117 cervical squamous-cell carcinoma patients who underwent extended hysterectomy and pelvic lymphadenectomy and the association of nuclear YB-1 expression with several clinicopathological factors including STAT3 expression and survival was investigated.
Results: Nuclear YB-1 expression was observed in 24 of 117 (20.5%) cases and was correlated with deep stromal invasion, and STAT3 expression by Fisher's exact test. Kaplan–Meier survival analysis showed that nuclear YB-1 expression was statistically indicative of a poor prognosis for progression-free survival, but not overall survival by log-rank test. By multivariate analysis, lymph node metastasis, STAT 3 expression and nuclear YB-1 expression were independent prognostic factors with regard to progression-free survival.
Conclusions: These data showed that nuclear YB-1 expression, a predictive marker of prognosis, is correlated with STAT3 expression and survival in cervical squamous-cell carcinoma.

8043 POSTER

ERCC1 Expression Predicts Response and Survival in Locally Advanced Cervical Carcinoma Patients Treated With Concurrent Chemoradiotherapy

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Background: No suitable biological marker has been identified in patient with locally advanced uterine cervical cancer treated with concurrent chemoradiotherapy, although there is growing demand in clinical practice for individualized treatment planning. The aim of this study was to investigate whether ERCC1 expression predicted tumour response and survival in uterine cervical cancer patients who had been treated with cisplatin-based concurrent chemoradiotherapy.
Materials and Methods: Fifty patients with stage II-III invasive squamous cell carcinoma of the uterine cervix who were treated with concurrent chemoradiotherapy were enrolled. ERCC1 expression was assessed by immunohistochemistry from pretreatment cervical biopsy tissues.
Results: Of the 50 tumours examined, 16 (32%) were classified as ERCC1-positive expression and 34 (68%) as ERCC1-negative expression. Patients with ERCC-negative expression had a significantly higher complete response (33/34, 97.1%) than patients with ERCC1-positive expression (12/16, 75.0%; $P = 0.015$). The 5-year disease-specific survival rates of the ERCC1-positive and -negative groups were 43.8% and 76.5%, respectively ($P = 0.011$). The 5-year overall survival for the ERCC1-positive and -negative groups was 50.0% and 85.3%, respectively ($P = 0.008$). Multivariate analyses showed that ERCC1-negative expression (HR, 0.293; 95% CI, 0.100–0.863; $P = 0.026$) was an independent risk factor predicting the disease-specific survival of the patients. For overall survival, ERCC1-negative expression was still an independent prognostic factor ($P = 0.036$).
Conclusions: These results suggest that the ERCC1 expression patterns in pretreatment specimens can be used to predict the clinical outcome, including the tumour response and survival in patients treated with cisplatin-based chemoradiotherapy for locally advanced uterine cervical cancer.

8044 POSTER

Prognostic Role of Microvascular Density (MVD), VEGF, HIF-1, and EGFR Expression in Women Suffering From Locally Advanced Cervical Cancer (LACC) Treated With Chemoradiotherapy in Colombia − ONCOLGroup Study

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Background: Recent data series showed that cervical carcinoma is the second leading cause of death among women in Colombia.
Methods: We want to describe the prognostic value of microvascular density (MVD), VEGF, HIF1 and EGFR in women suffering from LACC treated with chemoradiotherapy followed by high dose rate brachytherapy (HDRB). Overall response rates (ORR), progression-free survival (PFS) and overall survival (OS) were estimated.
Results: Sixty-one patients were included (mean age 52±10-yo); all of them had LACC (2.3% 2A/47.5% 2B/4.9% 3A/37.7% 3B/3.3% 4A/3.3% not defined), a tumour mean size of 6.4 cm (SD ± 1.8 cm) and HPV infection in 46% of the cases. Fifty-eight patients (95%) had a squamous pattern, two were adenocarcinomas and >50% presented moderated or poorly differentiated neoplasias. All of them were treated with chemotherapy (transitory interruption in RT was documented in 19% due to toxicity and in 21.4% of cases by other causes; mean cycles of platinum administered during radiotherapy was 4.8±1.0) and HDRB (77% completed all planed treatment). The median PFS and OS was 6.6-mo (range, 4.0−9.1) and 30-mo (range, 11−48) respectively. None of the variables had a positive effect on PFS, whilst multivariate analysis revealed that VEGF (p = 0.026) and EGFR expression levels (p = 0.030) and less than 6 cm tumour volume (p = 0.02) positively influenced the OS.
Conclusions: Classifying LACC patients treated with cisplatin-based chemoradiotherapy by protein expression had a positive influence on prognosis.

8045 POSTER

Fused Toes Homolog is a Novel Oncoprotein Involved in Uterine Cervical Carcinogenesis and a Potential Diagnostic Marker for Cervical Cancer

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Background: The high incidence and fatality rate of uterine cervical cancer warrant effective diagnostic and therapeutic target identification for this disease. Here, we have found a novel oncoprotein FTS (Fused Toes Homolog), which is involved in cervical cancer pathogenesis.
Materials and Methods: For Immunohistochemical analysis of FTS total 49 formalin-fixed paraffin-embedded specimens of human cervical CIN and carcinoma tissues were stained. For in vitro study, HeLa, ME180, SiHa, and CaSki cells were used.
Results: Immunohistochemical analysis of human cervical biopsy samples revealed that the expression of FTS is absent in normal cervical epithelium but progressively overexpressed in human cervical intraneoplastic lesions (CIN-I to CIN-III), this characteristic phenomenon put this protein, a potential diagnostic marker for the screening of early neoplastic changes of cervix. Using FTS-specific small hairpin RNA (shRNA) in cervical cancer cells, we determined a specific role for FTS protein in, cervical neoplasia. Targeted stable knock down of FTS in HeLa cells led to the growth inhibition, cell-cycle arrest, and apoptosis with concurrent increase in p21 protein. FTS effectively represses the p21 mRNA expression in dual luciferase assay which indicates that p21 is transcriptionally regulated by

this oncoprotein which in turn affect the regular cell-cycle process and its components. Consistent with this we found a reciprocal association between these proteins in early cervical neoplastic tissues.
Conclusions: These data unraveled the involvement of new oncoprotein FTS in cervical cancer which plays a central role in carcinogenesis. Targeted inhibition of FTS lead to the shutdown of key elemental characteristics of cervical cancer and could lead to an effective therapeutic strategy for cervical cancer.

8046 POSTER

Clinical Characteristics of Patients With Sporadic or BRCA Mutated Ovarian Cancer

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*BRCA*ness is a new clinical concept attempting to identify groups of patients with constitutional *BRCA1/2* deficiency. A recent Scottish study among 19 patients with *BRCA1/2* mutation, showed a high incidence of metastasis evolution whereas it was uncommon among a group of 38 sporadic ovarian cancers. The aim of this study was to confirm in another population these results.
Clinical and histological characteristics were retrospectively collected for *BRCA1/2* mutated ovarian cancer patients diagnosed between 2003 and 2007 in West France. A control group of sporadic cancer patients without familial or personal history of breast or ovarian cancer was identified in the same period with a 2:1 ratio.
Ninety-two patients were analysed (30 patients in the *BRCA1/2* group and 62 patients in the sporadic group). The mean age was 52 [36−64] and 62 [20−82] years respectively. At diagnosis, 63% and 84% were treated for an advanced stage in the *BRCA* group (stage III: 14 patients, stage IV: 4) and sporadic group (stage III: 34 patients, stage IV: 18). The histological subtype was serous for 60% and 71% of *BRCA* and sporadic group. At baseline, no visceral metastasis was found in the *BRCA* group, in contrast with 13% in the sporadic group (liver, lung, splenic). During the follow-up, 43% of *BRCA* and 34% of sporadic cancer patients developed metastasis (liver, lung, brain, bone). Platinum sensitivity mean time was 52 months [7–192] in the *BRCA* group and 30 months [3−53] in the sporadic group (43 and 25 months among advanced stage respectively). The overall survival was 66 months and 37 months for *BRCA* and sporadic group (50 and 34 months among advanced stage respectively).
This study confirms that ovarian cancer patients with constitutional *BRCA* mutations are younger, have a longer sensitivity to platinum and a better overall survival than sporadic ovarian cancer patients. However, we didn't confirm that visceral metastasis as a specific *BRCA*ness profile.

8047 POSTER

Safety and Immunogenicity Profile of Human Papilloma Virus 16/18-AS04 Adjuvant Cervical Cancer Vaccine in Healthy Adolescent Girls of Bangladesh

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Aim: Bangladesh has a highest level of incidence and mortality rates due to cervical cancer among the women. Prevalence of cervical cancer in Bangladeshi woman is 25−30/100,000. Human Papilloma Virus (HPV) is a necessary cause of cervical cancer. The study was conducted to assess the immunogenicity and safety profile of human papillomavirus (HPV)-16/18 AS04-adjuvanted cervical cancer vaccines in healthy Bangladeshi girls aged 9−13 years old.
Procedure: This was a randomized (3:1) controlled trial with two parallel groups, the vaccine and control groups, included 67 participants in Bangladesh. Subjects were given Glaxo-SmithKline HPV-16/18 AS04-adjuvanted cervical cancer vaccine and control with out vaccine at first day of vaccination (Day 0), at 1 month and 6-month schedule and followed up until month 7. Blood samples taken for HPV antibody at enrollment and one month post-dose at month 7 both from subjects and from controls. Safety data were gathered throughout the study.
Results: 50 subjects were received vaccine at day 0, at month 1 and at month 6. All initially, sero-negative subjects in the vaccine group had sero-convertion for HPV-16 and HPV-18 antibodies except one at month 7.17 Control did not receive vaccine. They were followed up for serious adverse events and blood samples taken for HPV antibody detection at day 0 and at month 7. No sero-conversion was found among the controls. Bivalent HPV vaccine was generally well tolerated, with no vaccine related serious adverse experiences.
Conclusions: The HPV-16/18 AS04-adjuvanted vaccine was generally well tolerated and highly immunogenic when administered to young adolescent females and would be a promising tool for prevention and control of cervical cancer in Bangladesh.

8048 POSTER

Dose Finding Study of Carboplatin in First Line Chemotherapy in Advanced Ovarian Cancer

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Background: The combination of carboplatin (CBDCA) and paclitaxel (PCL) is the standard treatment of ovarian cancer (OC). The recommended dose of CBDCA is 5−6 area under the curve (AUC). We have observed that many patients (pts) do not tolerate doses of AUC 6, mainly due to hematological toxicity. The aim of this study was to determine the maximum tolerated dose (MTD) of CBDCA in combination with PCL in this group of pts. We consider the MTD as the dose that provokes grade 3 hematologic toxicity and grade 2 non-hematologic toxicity, except N/V and alopecia.
Materials and Methods: All pts with stage III-IV OC, with a Karnofsky performance status (K) of 40–100%, and younger than 80 years old seeking care at the SOM of the HUCA in 2009, were included. CBDCA dose in the first cycle was AUC 5 or 5.5, depending on K and age. In order to reach the MTD of CBDCA, doses were increased or decreased by 0.5 AUC, up to 6 AUC. A blood count was performed on day 14 of each cycle. If neutrophils count at 3 weeks was <1500/μL, the cycle was delayed a week and if not recovered, CBDCA was reduced by 0.5 AUC.
Results: From Jan to Dec 2009, 34 pts were registered (7 not evaluable: 1 >80 years, 6 protocol deviations). Pts characteristics were: median age 59 (45−77), median K 80% (40−90), stage III 70.4% and IV 29.6%, previous surgery 66.7%, interval surgery 25.9%, and inoperable 7.4%. We analyzed the first 6 cycles of treatment. Only 37% of pts were able to achieve and maintain AUC 6 in the 6th cycle. The percentages of cycles with AUC 5, 5.5 and 6 are shown in the table. A dose of AUC 6 was only possible in 35.4% of cycles. A nadir of 500–999 neutrophils was reached by 70.37% of pts and 40.74% presented aplasia, at some point during treatment. There were no toxic deaths.
Conclusions: In an unselected group of pts with stage III and IV OC, only 37% were able to achieve and maintain AUC 6 of CBDCA. Given the interest of these results, the study will be extended to 2010. Scientific limitation: 11% of pts had a K <60%.

AUC	% of cycles[a]	% of pat. In 6th cycle[b]	Delay in treatment[c]	
			Yes	No
<5	6.83	7.41	7.41	0
5	29.81	44.44	33.33	11.11
5.5	27.95	11.11	7.41	3.70
6	35.40	37.04	14.81	22.22

a. Percentage of cycles received with the AUC indicated in the left column. b. Percentage of patients able to achieve in the 6th cycle the AUC indicated in the left column. c. Percentage of delays that were needed to reach in the 6th cycle the AUC indicated in the left column.