Conclusions: In FIGO stage I disease, primary lesions including benign, borderline and invasive components were significantly larger than those in stage III disease. However, no such correlation was found when only the invasive tumour components were analyzed. The invasive primary tumour size did not influence survival in either stage I or III disease. There was no correlation between the size of the primary invasive tumour and the size of intraperitoneal metastases. Larger metastases were associated with the presence of ascites, bowel involvement, tumour residuals > 2 cm and a shorter progression-free and overall survival.

8025 POSTER

Correlation of Topo II alpha expression and amplification with efficacy of pegylated liposomal doxorubicin in a GEICO phase II trial for platinum-resistant (PR) recurrent ovarian carcinoma (ROC)

A. Gonzalez-Martin[1], A. Casado[2], I. Blanco-Sanchez[3], I. Bover[4], A. Herrero[5], A. Santaballa[6], C. Caballero[7], C. Churruca[8], E. Calvo[9], B. Ojeda[10]. *[1]Centro Oncologico MD Anderson International España, Medical Oncology, Madrid, Spain; [2]Hospital Clinico San Carlos, Medical Oncology, Madrid, Spain; [3]Hospital Ramon y Cajal, Pathology, Madrid, Spain; [4]Hospital Son Llàtzer, Medical Oncology, Palma de Mallorca, Spain; [5]Hospital Universitario Miguel Servet, Medical Oncology, Zaragoza, Spain; [6]Hospital Universitario La Fe, Medical Oncology, Valencia, Spain; [7]Hospital General Universitario de Valencia, Medical Oncology, Valencia, Spain; [8]Hospital Donostia, Medical Oncology, San Sebastián, Spain; [9]Hospital Virgen del Rocio, Medical Oncology, Sevilla, Spain; [10]Hospital de la Santa Creu i San Pau, Medical Oncology, Barcelona, Spain*

Background: Topo IIa is an enzyme which plays a critical role in DNA replication and recombination, and is also the target for doxorubicin. Response to doxorubicin has been associated to Topo IIa in breast cancer.
Materials and Methods: Tissue samples from patients participating in a prospective phase II trial with pegylated liposomal doxorubicin in platinum-resistant ROC conducted by GEICO were obtained for the analysis (Casado A et al. ASCO 2003. Abstract 1942). Topo IIa expression was determined by inmunohistochemistry (IHC) and amplification by fluorescence in situ hybridization (FISH). Topo IIa was considered positive with $\geqslant$ 10% cells stained by IHC.
Results: Samples from 45 patients of the 82 included in the trial were obtained and valid for the analysis. The rate of expression by IHC was: 0% (20%), <10% (35.5%), $\geqslant$ 10% (44.4%). Only 1 patient had amplification. The response rate obtained in 44 evaluable patients was: 1 CR (2.2%), 3 PR (6.8%), SD (31.8%). No response was observed in patients without expression of Topo IIa. The 3 patients with PR were seen in the group with an IHC staining $\geqslant$ 10%, and the patient with CR was in the group with IHC staining <10%. The patient with CR was also the only one with amplification observed in our study. The rate of SD was similar in the 3 groups independently of the expression by IHC. Correlation between Topo IIa expression and progression free survival will be presented.
Conclusions: Topo IIa expression and amplification may be a predictor of response to pegylated liposomal doxorubicin in patients with platinum-resistant ROC. Further studies confirming this hypothesis are warranted.

8026 POSTER

The predictive and prognostic value of serum CA125 kinetics and CA125 nadir during paclitaxel/platinum based chemotherapy (QT) in patients with advanced ovarian carcinoma (OC)

A. Tibau[1], M.B. Ojeda[1], R.M. Nadal[2], A. Gallardo[3], J. Pérez Altozano[1], N. Sala[1], J.M. Mazarico[1], I. Boguña[4], V. Artigas[5], A. Barnadas[1]. *[1]Hospital de Sant Pau, Medical Oncology, Barcelona, Spain; [2]Hospital del Mar, Medical Oncology, Barcelona, Spain; [3]Hospital de Sant Pau, Pathology, Barcelona, Spain; [4]Hospital de Sant Pau, Obstetrics and Gynecology, Barcelona, Spain; [5]Hospital de Sant Pau, Surgery, Barcelona, Spain*

Background: The tumor marker CA125 is an accurate and reliable marker for monitoring the response and detecting early relapse in OC. The aim of this retrospective study is to analyze the predictive and prognostic value of CA125 kinetics and the implications of the different levels of CA125 within the normal range after QT.
Methods: Over a 13 years (1996−2008), 127 patients (pts) were treated with standard QT regimen for FIGO stage IIb-IV epithelial OC. The median age was 64 years old (range, 24−87 years). The tumors were classified: 70(55%) serous, 24(19%) poorly differentiated, 14(11%) endometrioid and 19(15%) clear cell carcinoma. FIGO stage: 12(9%) II, 95(75%) III and 20(16%) IV. Tumor grade: 1(1%) G1, 11(9%) G2 and 115(90%) G3. Residual disease after initial surgery: 52(41%) <2 cm and 39(31%) >2 cm. After surgery 117(92%) of the pts received a median of 6 cycles with platinum based (cisplatin or carboplatin) QT in combination with paclitaxel. Serial measurement of CA125 had been made before each cycle of QT. Median follow-up has been 31months. Ninety-three(73%) pts achieved levels <35U/ml after completion of QT. The nadir value of CA125 was stratified into three arbitrary groups: group 1, $\leqslant$10 U/ml, group 2, 11−20 U/ml and group 3, 21−35 U/ml. The pre-QT CA125 level was categorized into two arbitrary groups: group A $\leqslant$200 U/ml and group B>200 U/ml. Time to nadir and time to negativization were also studied and classified into two arbitrary groups: group A$\leqslant$72 days and group B>72 days. CA125 half-life was calculated by mono-compartmental logarithmic regression. Survival analyses for disease-free survival (DFS) and overall survival (OS) used univariate (Kaplan-Meier) and multivariate (Cox) model.
Results: For 127 pts, 88(69%) relapsed and 60(47%) died. DFS according to 3 groups was 34, 20, 14 months, respectively ($p < 0.0001$). OS for groups 1, 2 and 3 was 7.5, 3 and 3 years, respectively ($p < 0.0001$). Pre-QT CA125 ($p < 0.002$) and time to negativization ($p < 0.043$) all had a univariate prognostic value for DFS and OS. In Cox models, FIGO stage ($p < 0.0001$) and nadir concentration ($p < 0.0001$) were the most powerful prognostic factors for DFS and OS. We found no differences in DFS and OS related to time to nadir and CA125 half-life.
Conclusion: Serum CA125 kinetics during early QT has a strong predictive and prognostic relevance for pts with advanced OC. Besides, within normal range, the differences between CA125 levels could add prognostic information and stratify pts according to the risk of progression. Categorizing pts would be a useful tool when performing consolidation QT in future clinical trials.

8027 POSTER

18FDG PET staging versus conventional (CT scan and laparoscopy) staging in advanced epithelial ovarian cancer: correlation with survival

C. Zamagni[1], M. Rosati[1], A. Musto[2], L. Ricci Maccarini[3], S. Quercia[1], A. Bernardi[1], D. Rubino[1], P. De Iaco[3], S. Fanti[2], A.A. Martoni[1]. *[1]Ospedale S. Orsola-Malpighi, Medical Oncology Unit, Bologna, Italy; [2]Ospedale S. Orsola-Malpighi, Nuclear Medicine Unit, Bologna, Italy; [3]Ospedale S. Orsola-Malpighi, Obstetrics and Gynecology Department, Bologna, Italy*

Background: Epithelial ovarian cancer (EOC) is diagnosed in advanced stages in up to 70% of cases; chest and abdomen CT scan and open laparoscopy (conventional staging) are usually performed in order to evaluate the optimal therapeutic approach (upfront debulking surgery versus primary chemotherapy). The use of ^{18} FDG-PET has been proposed in order to assess the response to neoadjuvant chemotherapy but its role in the initial staging EOC is unclear. The aim of this study (a part of the Arianna 02 Project) is to compare the conventional staging with the PET staging in patients candidate to neoadjuvant chemotherapy for advanced EOC.
Material and Methods: Eligible pts had stage IIIC-IV EOC unsuitable for optimal upfront surgery according to standard CT scan and open laparoscopy evaluation. Six courses of neoadjuvant carboplatin AUC 5 and paclitaxel 175 mg/sm, every 3 weeks were administered before surgery. ^{18}FDG-PET was performed at baseline in order to compare the PET staging with the conventional staging (as defined above). Survival according to stage was analyzed with Kaplan-Meier analysis.
Results: 48 stage III/IV pts were enrolled and received neo-adjuvant chemotherapy. In 38 pts PET and conventional staging were in accordance (23 stage III and 15 stage IV), while 6 stage IV and 4 stage III pts by conventional staging were classified as stage III and stage IV by PET, respectively (overall concordance 80%). After a median follow-up of 29 mo.s, 36 pts (75%) have progressed, and 26 (54%) have died. When staged by conventional method the median time to progression and overall survival for stage IIIC vs stage IV patients were 15 vs 11 mo.s ($p = 0.22$) and 34 vs 20 mo.s, respectively ($p = 0.27$).
On the contrary, when PET stage was considered, median TTP (20 vs 8 mo.s, p 0.001) and OS (43 vs 18 mo.s, $p = 0.001$) were significantly longer for stage III vs stage IV pts.
Conclusion: initial staging of advanced EOC patients by ^{18} FDG-PET correlates with baseline prognosis in patients unsuitable for upfront surgery and treated with neoadjuvant chemotherapy.