Abstracts

**EP251/#311 COMPARISON OF SURVIVAL OUTCOMES ACCORDING TO BRCA1/2 VARIANT TYPE IN HIGH-GRADE SEROUS OVARIAN CANCER**

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**Objectives** Mutations of BRCA1/2 improve cancer prognosis due to their better response to platinum-based chemotherapy. To appropriately evaluate the influence of pathogenic BRCA1/2 mutations on survival outcomes, various clinical factors related to chemotherapy should be controlled because those mutations are correlated with platinum-based chemotherapy agents. However, few previous studies have considered factors, such as delivered dose intensity (DDI) of chemotherapy agents, relative dose intensity (RDI), or treatment delay. This study evaluated OS and PFS under similar conditions of first-line adjuvant chemotherapy within seven years in HGSOC.

**Methods** A total of 160 patients with HGSOC were enrolled. All patients underwent chemotherapy with a combination of taxane and platinum drugs. A germline BRCA1/2 genetic test was conducted by two methods: NGS and PCR with direct sequencing. The pathogenic BRCA1/2 variant group included PV and LPV, while the non-pathogenic group included wild-type and VUS. For first-line chemotherapy, DDI, RDI, and delay of duration were calculated in all patients.

**Results** Of the tested variants, 108 (67.5%) were non-pathogenic and 52 (32.5%) were pathogenic. No significant difference was found in various clinical factors of cancer stage, surgery. In chemotherapy, there was no significant difference for the number of cycles, DDI, RDI, delayed period. There was no significance for OS or PFS within five or seven years.

**Conclusions** In patients with HGSOC, the OS and PFS for germline BRCA1/2 pathogenic and non-pathogenic variants were not significantly different under similar conditions of first-line adjuvant chemotherapy within seven years.

**EP252/#515 PREDICTION OF SURGICAL OUTCOMES OF INTERVAL DEBULKING SURGERY (IDS) USING IN ADVANCED OVARIAN CANCER: A NOVEL SCORING SYSTEM USING POST-NEOADJUVANT CHEMOTHERAPY (NAC) COMPUTED TOMOGRAPHY (CT)**

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**Objectives** Residual disease after interval debulking surgery (IDS) is the most critical prognostic predictor in advanced ovarian cancer. Predicting complete resection is important to reduce futile surgery and improve survival rate. The aim of this study is to create new radiologic scoring system in preoperative computed tomography (CT) for prediction of optimal cytoreduction.

**Methods** CT scans of 72 patients who underwent IDS were retrospectively reviewed. Residual disease measuring ≥ 0.5 cm was presented suboptimal cytoreduction. All surgical record and new radiologic scoring model were made according to...
Sugerbaker’s Peritoneal Cancer Index (PCI). This system scored the degree of tumor extent from 0 to 5 points for each region and the larger the number, the more severe it is.

**Results** The complete cytoreduction rate of the total study population was 59.7% (n = 43). The patients with optimal cytoreduction after IDS had significantly longer progressive free survival than other patients (p value = 0.04). CA125 levels after NAC did not affect optimal resectability (the area under the ROC curve(AUC) = 0.584, 95% CI : 0.450, 0.719). Using univariate and multivariate analysis, in prediction model including the greater omentum, ascending colon and right paracolic, AUC was 0.651 (95% CI: 0.539, 0.763). Using random forest, top 3 CT features were selected with a threshold of 0.1; greater omentum, pelvis, lesser sac and lesser omentum. The top 3 features achieved the AUC of 0.729 (95% CI: 0.622, 0.833).

**Conclusions** Low CT score of disease at top 3 features on pre-operative CT scan can be strong predictor for optimal cytoreduction.