cytoreduction (2), and sub-optimal cytoreduction (3). CA-125 and computed tomography response were classified by RECIST criteria and compared using Fisher's exact and McNemar tests, respectively. Progression-free survival (PFS) and overall survival (OS) were analyzed using Cox-proportional hazard.

Results One-hundred-one patients, median age 60 years, followed by median of 36 months, were included. Groups 1 (n=10), 2 (n=61), and 3 (n=31) presented, respectively, mean OS of 75.7 (63–88); 55 (95% CI 41–69), and 26 (95% CI 19–32) months (p = <0.004). The median DFS was 33 (27–66) and 7.7 (6–8) months for groups 1 and 2, respectively. Complete radiological response was seen in 80%, 25% and 3% (p= <0001) while normalization of CA-125 was observed in 100%, 61% and 38% on groups 1, 2 and 3, respectively (p= 0.003). OS among patients with CA-125 normalization (n=62) was higher than among non-responders (61, CI 95% 41–81 months vs. 30, CI95% 23–37 months (p=0.003). Median OS associated with complete, partial and stable/progression radiological response was 79(24–134), 35(26–43) and 30(12–48) months, respectively (p= 0.034).

Conclusions Complete histopathological response, normalization of CA-125 and complete radiological response after NACHT were associated with improved overall and disease free survival.

IGCS19-0541

95 THE ROLES OF CD44 EXPRESSION AND THE COMBINATION OF CD133, CD44, ALDH1A1 EXPRESSIONS IN CHEMOTHERAPY RESPONSE OF EPITHELIAL TYPE OVARIAN CANCER

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Objectives Determining the roles of CD44 expression and the combination of CD133, CD44, ALDH1A1 expressions in chemotherapy response of epithelial-type ovarian cancer.

Methods Ambispective cohort (retrospective and prospective). The subject of this study was 55 patients with epithelial-type ovarian cancer at Cipto Mangunkusumo Hospital, Jakarta, from March 2017 to May 2018. Demographic and clinicopathological data were taken from medical records. CD133, CD44, and ALDH1A1 were examined using immunohistochemistry. CD133, CD44, and ALDH1A1 expressions of type I and type II ovarian cancer patients were associated with chemotherapy response. Multivariate analysis was used to model the prognosis for 10 months. Receiver Operating Characteristic (ROC) curve analysis was used as the scoring system.

Results The demographic data shows that most of the patients were older than 45 years old 72.7%, in stage I 41.8%, poorly differentiated 54.5%, and in type II 29.1%. Significant differences between histopathological types were shown in CD44 expression. The highest chemoresistance in ROC curve, based on the combination of three immunohistochemistry expressions and clinicopathology factors, namely stage III-IV, older than 45 years old, poorly differentiated, type II, negative CD133, high CD44, and high ALDH1A1 is 0.841.

Conclusions CD44 expression plays a role in the histopathological epithelial type of ovarian cancer. Negative CD133, high CD44, and high ALDH1A expressions and clinicopathology factors are highest chemoresistance group in epithelial ovarian cancer.

Poster Discussion with the Professor Station 5

IGCS19-0314

96 COMPUTERIZED MORPHOMETRY OF EPITHELIAL FIMBRIAE COMBINED WITH ARTIFICIAL INTELLIGENCE IN BRCA CARRIERS MAY IDENTIFY PATIENTS AT RISK FOR DEVELOPING OVARIAN CANCER; A PRELIMINARY STUDY

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Objectives Some ovarian tumors may originate in epithelial cells of the fallopian tubes. Computerized morphometry was able to find significant alterations in the fallopian tube epithelium of healthy BRCA carriers. The purpose of this study was to identify a subgroup of BRCA carriers that may be at risk to develop ovarian cancer by evaluation of the epithelium of fallopian tubes using artificial intelligence.

Methods Four groups of patients were analyzed. Healthy patients and ovarian cancer patients, BRCA carriers and non -carriers. All fallopian tubes were normal by H&E examination. Using ImageProPlus software and Neural Network analysis the nuclear symmetry of 65 fimbriae epithelium cells was analyzed. Further evaluation using artificial intelligence was applied in order to detect a subpopulation among fimbriae of healthy BRCA carriers, at risk for ovarian cancer.

Results Significant differences were found between healthy patients and ovarian cancer patients and between BRCA carriers and non-carriers. The artificial intelligence algorithm was able to accurately predict BRCA carriers with associated ovarian cancer based on fallopian tubes nuclear morphometry.

Conclusions These results reinforce the hypothesis that fimbriae epithelium cells of BRCA carriers' may undergo early-stage changes that may predict progression toward malignancy. Artificial intelligence may identify patients at high risk for malignancy initiated in the fallopian tubes.