and safety of this pilot study strongly support the further investigation of low-dose Lenvatinib plus Toripalimab in patients with heavily pretreated gynecological solid tumors.

**EP304/#430** AUTOPHAGY DEFECT AND ITS CLINICAL SIGNIFICANCE IN SEROUS OVARIAN CARCINOMA

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Introduction Autophagy is a physiological cellular process for degradation and recycle of useless proteins, however it maintains survival of cancer cells with defects in apoptosis. This study aimed to evaluate autophagy status and the clinical significance in serous ovarian carcinoma (SOC).

Methods Tissue microarray including 72 SOC, 10 serous adenoma, and 13 borderline serous tumors was used for immunohistochemical analysis. Immunoreactivity of LC3, Beclin-1, p62 and TFEB were semi-quantitatively scored. Clinicopathological parameters were obtained from medical records. Kaplan-Meier estimate and the Cox regression were used for survival analysis.

Results LC3 and TFEB were present in 31.9% and 20.8% of SOC. Beclin-1 and p62 were significantly upregulated in SOC compared with controls (70.8% and 95.8%; $p = 0.03$ and $p < 0.001$, respectively). Significant correlation was observed among LC3, Beclin-1 and p62. A simultaneous accumulation of Beclin-1 and p62 represents coexistence of induction and last stage of autophagy, suggesting autophagy activation with impairment of autophagy flux. In univariate analysis, the presence of TFEB, suboptimality, advanced FIGO stage, and chemoresistance were significantly associated with worse disease-free survival and overall survival (OS). Multivariate analysis showed that surgical optimality and chemoresistance were independent predictor for OS. The expressions of p62 and TFEB were positively correlated with FIGO stage ($p = 0.017$ and $p = 0.015$, respectively) and Beclin-1 expression was lower in high-grade tumor than low-grade tumor ($p = 0.001$).

Conclusion/Aplications A dysregulation of autophagy was found in SOC. Beclin-1, p62 and TFEB were associated with aggressiveness and poor prognosis of SOC.

**EP305/#401** NEUTROPHIL LYMPHOCYTE RATIO AND PLATELET LYMPHOCYTE RATIO AS PROGNOSTIC MARKERS IN OVARIAN CANCER

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Introduction Inflammation plays an essential role in tumour development in cancer initiation, progression and metastasis. Immune cell components of blood count offer an attractive...
measure of inflammation being part of routine clinical care at minimal cost and inconvenience to the patient. It is hypothesised that raised Neutrophil Lymphocyte Ratio (NLR) and Platelet Lymphocyte Ratio (PLR) are two such markers associated with poor prognosis in ovarian cancer. Hence, this study was conducted to find association NLR and PLR with survival outcome in ovarian cancer.

Methods This study was conducted in a tertiary care teaching hospital after ethical clearance from Institutional ethics committee and written informed consent from all patients recruited. Records of 260 ovarian cancer cases admitted over five years were retrospectively searched for pretreatment neutrophil, lymphocyte and platelet counts to calculate NLR and PLR. Details of demography, disease characteristics, treatment and recurrence were recorded. Survival outcomes were correlated with the NLR and PLR. Statistical analysis was performed on SPSS version 21 using ROC curves and correlation analysis.

Results NLR and PLR had negative correlation with 5-year overall survival rate. ROC analysis showed that NLR below 2.8 was associated with 5 year OS of 72.2% while NLR above 2.8 was associated with OS of 27.8%. PLR below 204 was associated with 5 year OS of 77.7% while that above 204 was associated with 5 year OS of 22.3%.

Conclusion/Implications Both Neutrophil Lymphocyte Ratio and Platelet Lymphocyte Ratio are independent prognostic inflammatory markers for survival of ovarian cancer.

Introduction To evaluate the impact of obesity on surgical outcomes, adverse effects of chemotherapy, and survival outcomes among patients with epithelial ovarian cancer in the Thai population.

Methods We retrospectively reviewed the medical records of epithelial ovarian cancer patients who underwent staging laparotomy at Siriraj Hospital from January 2008 to December 2018. Patient characteristics, surgical outcomes, chemotherapy-related complications, and survival were compared between non-obese (BMI < 25.0) and obese (BMI ≥ 25) patients using the Western Pacific Regional Office (WPRO) BMI cut-off criteria.

Results Of the 444 patients initially included, 18 were excluded, leaving 426 patients for analysis, with 21.9% (n=93) in the obesity group and 78.1% (n=333) in the non-obesity group. The obesity group had a higher incidence of diabetes mellitus (P < 0.0001), hypertension (P = 0.003), and dyslipidemia (P = 0.027) than the non-obesity group. Obesity was independently associated with postoperative complications, including wound problems (adjusted OR: 6.175; 95% CI: 1.891–13.191; P < 0.001) and venous thromboembolism (adjusted OR: 5.991; 95% CI: 2.848–12.605; P < 0.001), but fewer event of neutropenia (P = 0.002) and delays in chemotherapy administration (P = 0.015). The two groups had no significant difference in progression-free survival (P = 0.135) or five-year overall survival (P = 0.923).

Conclusion/Implications Obesity does not affect survival outcomes in patients with epithelial ovarian cancer but increases the risk of postoperative complications, including wound complications and venous thromboembolism.

Introduction The 5-year survival rate for patients with advanced epithelial ovarian cancer remains poor. Given the high mortality associated with this disease, it is important to analyze the factors associated with long-term survival beyond 5 years.

Methods We retrospectively analyzed data from patients with stage III or IV epithelial ovarian cancer diagnosed from 2013 to 2019. Characteristics of women who survived ≥5 years after diagnosis were compared to those who survived fewer than 5 years of diagnosis using chi-square tests and multivariable logistic regression.

Results Of the 345 patients who survived more than 5 years, 214 (62%) experienced recurrence, and 43 (12.5%) died with disease during a median f/u time of 78 (60–144) months. The long-term survivors were more likely to receive the primary cytoreductive surgery (85.0% in ≥5 year group, 68.9% in <5 year group, p<0.001) and had higher ratio of no gross residual disease (78.3% in ≥5 year group, 60.4% in <5 year group, p<0.001). They had a higher rate of BRCA mutation (p=0.001), longer progression-free survival (median 44.5 vs. 18.0 months in ≥5 year group vs. <5 year group, p<0.001). In addition, when the disease recurred, they received more aggressive surgical treatments after disease recurrence (24.6% in ≥5 year group, 8.3% in <5 year group, p<0.001).

Conclusion/Implications Long-term survival is not common in patients with epithelial ovarian cancer, even in advanced cases. Although several prognostic factors are well known, there is a need to follow up on the current state of knowledge of relevant factors in long-term survivors. These findings are important for patient counselling.