(95%CI: 62.9%-88.8%) achieved R0 resection. During NACT, the most common grade 3/4 AEs were hematologic toxicities, including neutropenia (78%), leucopenia (48%) and thrombocytopenia (24%). All AEs returned to normal or acceptable levels after receiving appropriate treatment.

Conclusion/Implications Nab-p plus carboplatin as a NACT regimen was effective and tolerable for unresectable epithelial OC.

**EP327/#774** PREDICTIVE MODELS FOR DIFFERENTIATION OF EPITHELIAL OVARIAN CANCER FROM BENIGN OVARIAN MASS

**Introduction** Although there have been advancements in triaging women with pelvic masses using multimodal laboratory assays like ROMA and CPH-I, there is still a need for more cost-effective and efficient models. Additionally, there is a need for a reliable model that can detect EOC in premenopausal women at an early stage.

**Methods** The study analyzed data from 122 EOC patients and 820 patients with BOMs. Pearson’s correlation coefficient, the Mann-Whitney U test, the area under the curve (AUC) were used for analysis.

**Results** 39.3% of the 122 EOC patients had stage I-II cancer, and 60.7% had stage III-IV cancer. Multivariate logistic regression analysis revealed that human epididymal secretory protein 4 (HE4) and red cell distribution width (RDW) were significant predictors of EOC and constituted the full model (FM). The AUCs of FM for predicting EOC were comparable to those of ROMA or CPH-I, regardless of tumor stage or menopausal status. However, the sensitivity of FM at a set specificity of 75% was significantly higher than that of ROMA in predicting EOC in premenopausal women.

**Conclusion/Implications** The AUCs of FM were comparable to those of ROMA or CPH-I in terms of predicting EOC, regardless of the tumor stage or menopausal status; however, the FM was more sensitive than ROMA in predicting EOC in premenopausal women at a set specificity of 75%. Additionally, FM has the advantage of being less expensive than ROMA or CPH-I. Further prospective studies are required to validate these results of present study.

**EP330/#1472** ARTIFICIAL INTELLIGENCE-BASED MODEL ENABLES ACCURATE DIAGNOSIS OF OVARIAN CANCER USING LABORATORY TESTS: A MULTICENTER, RETROSPECTIVE STUDY

**Introduction** Early diagnosis of ovarian cancer (OC) is difficult due to the lack of effective biomarkers. Laboratory tests are necessarily applied in clinical routine practice and some tests have shown diagnostic and prognostic relevance to OC.

**Methods** In this multicenter, retrospective study, we collected 98 laboratory tests and the age of women with or without OC admitted to three hospitals during 2012 and 2021. A risk prediction fusion framework (MCF model) that combined
estimations from twenty artificial intelligence classification models was developed for OC diagnosis. It was evaluated on an internal validation set (3,007 individuals) and two external validation sets (5,641 and 2,344 individuals), respectively. The performance of MCF model was compared with the classic OC biomarker CA125 and HE-4, as well as seven competing state-of-the-arts methods.

**Results** Based on 52 features (51 laboratory tests and age), the MCF achieved an AUC of 0.949 (95% CI 0.948–0.950), 0.882 (0.880–0.885), and 0.884 (0.882–0.887). Most features were significantly associated with accuracy of OC diagnosis according to univariate logistic regression. The MCF model showed higher AUC and sensitivity compared with CA125 and HE4 in identifying OC patients. The MCF also tolerated with input laboratory tests exclusive of CA125 or other tumor markers and yield acceptable prediction accuracy, and outperformed state-of-the-arts models. The MCF was wrapped as an OC prediction tool publicly available at https://github.com/xinzhen-lab/OC-prediction.

**Conclusion/Implications** MCF model using laboratory tests achieved satisfactory and consistent performance in OC diagnosis from three validation sets. The included laboratory tests besides CA125 and HE4 contributed to diagnosis of ovarian cancer.

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**EP331/#242**

**SENTINEL LYMPH NODES MAPPING IN OVARIAN CANCER- PRELIMINARY RESULTS FROM SINGLE CANCER CENTER STUDY**

Zhengmao Zhang*, Hongxia Wang. Fourth Hospital of Hebei Medical University, Gyn, Shijiazhuang, China

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**Introduction** Objective: To analyze the distribution, detection rate, false negative rate, sensitivity and negative predictive value of the Sentinel Lymph nodes (SLN) and explore the value of SLN mapping in predicting the LNs metastasis in ovarian cancer.

**Methods** It is a prospective single arm trial at one cancer center. 29 cases of ovarian cancer patients were enrolled from May 1, 2020 to Dec. 31, 2022. All the patients were injected with methylene blue into the ovarian cortex, uterine horns and infundibulopelvic ligaments by the same surgeon who once learned SLN mapping technique at Memorial Sloan-Kettering Cancer Center, SLNs biopsy was performed followed by systematic pelvic and para-aortic lymphadenectomy. The negative SLNs on HE staining were detected by immunohistochemistry cytokeratin staining (AE1/AE3) for low-volume metastasis.

**Results** The overall detection rate of SLN in ovarian cancer was 100%, sensitivity was 85.7%, false negative rate was 14.3%, and negative predictive value was 95.7%. The average of 31 LN and 9 SLNs were dissected for each person. SLN of ovarian cancer was mainly distributed in the supermensentric and inframensentric Para-cava(34.8%, 33.3%). 7 cases of LNs metastasis were found among all 29 cases, there were 12 SLNs metastasis and 45 NSLNs metastasis. 1 SLN was found to be isolated tumor cells (ITC). Metastatic SLNs mainly distributed in the Para-caval region(91.2%).25 cases were PDS and 9 were IDS.

**Conclusion/Implications** Intraoperative SLN mapping by injecting methylene blue is safe, feasible for predicting the LNs