

respectively. There were 126 cytology sections, each of which required 6.67 minutes for manual diagnosis and 5.00 minutes for AI diagnosis.

**Conclusion/Implications** The AI image recognition system has high diagnostic accuracy, sensitivity and specificity, which is equivalent to the manual diagnosis level of professional pathologists, and this system has application value in the diagnosis of benign and malignant endometrial cell clumps.

EP143/#483

#### A STUDY EVALUATING LIQUID-BASED ENDOMETRIAL CYTOLOGY TEST AND TRANSVAGINAL ULTRASONOGRAPHY AS A SCREENING TOOL FOR ENDOMETRIAL CANCER IN 570 POSTMENOPAUSAL WOMEN

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**Introduction** To evaluate the combination of transvaginal ultrasonography (TVS) and endometrial cytology test (ECT) as a potential diagnostic strategy for endometrial cancer and endometrial precancerous lesions in postmenopausal patients.

**Methods** 570 postmenopausal patients admitted in our hospital due to abnormal bleeding or other symptoms and/or with endometrium thickness over 5 mm on ultrasound. The endometrial thickness was evaluated by TVS. Following obtainment with written consent, all patients underwent ECT, hysteroscopy and then dilatation and curettage (D&C). Cytological sampling was conducted by scratching the uterus cavity using SAP-1 and the samples were prepared as liquid-based smear using SurePath technology. The samples were stained using Papanicolaou method. The correlation between cytological diagnosis and TVS results with the D&C histological diagnosis was analyzed. The WHO classification was used for diagnosis.

**Results** Sensitivity of ECT, TVS, ECT or TVS positive, ECT and TVS positive to diagnose atypical hyperplasia or worse were estimated at 80.7%, 86.8%, 97.4%, 70.2%, specificity at 94.7%, 20.4%, 17.5%, 88.4%, positive predictive value at 58.2%, 21.1%, 22.8%, 60.2%, negative predictive value at 94.4%, 86.1%, 96.4%, 92.2%, and accuracy at 84.6%, 33.7%, 33.5%, 84.7%, respectively.

**Conclusion/Implications** transvaginal ultrasonography and Endometrial cytology test may be regarded as a effective first-line method in endometrial pathology detection in postmenopausal women.

EP144/#485

#### PRELIMINARY STUDY OF CONFOCAL LASER ENDOMICROSCOPY FOR IN VITRO SPECIMENS OF THE ENDOMETRIUM

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**Introduction** This study observed and described the morphological characteristics of the endometrium of the resected uterus using confocal laser endomicroscopy. This included normal endometrium, non-atypical endometrial hyperplasia,

endometrial hyperplasia without atypia, and endometrial carcinoma, thereby laying a foundation for finding the precise localization and resection of endometrial lesions, given the feasibility of confocal laser endomicroscopy-assisted hysteroscopy.

**Methods** This prospective study included 74 patients who underwent hysterectomy. We used confocal laser endomicroscopy to observe the endometrium of resected uteruses and described the characteristics of endometrium in different states by comparing histopathological findings (primary objects). The secondary objects of observation were the myometrium, endocervical canal, and surface of the external os of the cervix.

**Results** A total of 74 patients : 19 with EC , 3 with atypical endometrial hyperplasia, 22 with benign diseases, 20 with CC, and 7 with OC and borderline tumor. The dynamic images of the endometrium were observed and recorded using pCLE. Considering histopathology as the gold standard, the diagnostic concordance rate of pCLE was 97.3% in patients with EC and precancerous lesions and 100% in EC.

**Conclusion/Implications** Confocal laser endomicroscopy provides real-time high-resolution images of the normal endometrium and endometrial lesions. Compared with histopathology, confocal laser endomicroscopy has high diagnostic accuracy and may become an auxiliary examination tool for hysteroscopy, as it is useful for early identification of endometrial lesions, real-time diagnosis of tumor, and detection of tumor boundaries for complete tumor resection. These findings can lay a foundation for the feasible use of fertility-sparing local excision of tumor lesions by hysteroscopy.

EP145/#573

#### NOMOGRAM PREDICTION MODEL OF SEVERE POSTOPERATIVE COMPLICATIONS AFTER CYTOREDUCTIVE SURGERY FOR ADVANCED OVARIAN CANCER

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**Introduction** It has been established that age, smoking, duration of operation, hypertension and other medical complications are independent risk factors for postoperative complications. Kumar et al. developed the first histogram prediction model for postoperative complications of ovarian cancer, which incorporated age, BMI, ASA score, preoperative albumin, stage, and surgical complexity to help clinicians and patients make patient-centered decisions about PDS. The purpose of this study was to analyze the influencing factors of postoperative complications, and then construct a nomogram prediction model for Clavien-Dindo grade 3–4 postoperative complications.

**Methods** 200 patients undergoing cytoreductive surgery from January 2019 to January 2023 were collected. They were divided into SPC group (n=57) and no SPC group (n=143). Univariate analysis and logistic regression analysis were used to analyze the risk factors, and a nomogram model was established to predict the occurrence of SPC in cytoreductive surgery patients.

**Results** Univariate analysis showed that there were significant differences in age, preoperative CA125, preoperative HE4, preoperative VEGF, preoperative tumor area score, tumor load score, albumin in the two groups (P<0.05). Multivariate