The median SLN count was 3.2 (1–6). The overall and bilateral detection rate was 95% and 86%. Sensitivity, specificity and negative predictive value were 92.3%, 100% and 96.8% respectively per side. There were no allergic reactions to the ICG.

**Conclusion**
NIR fluorescence imaging with ICG is an excellent and safe tracer modality for SLN mapping with a very high overall (95%) and bilateral (86%) detection rate. Therefore, SLN mapping is efficient in identifying metastatic nodal disease without compromising oncological safety.

**Disclosures**
No

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**Abstract #65**

**EVALUATION OF SERUM BIOMARKERS HUMAN EPIDIDYMIS PROTEIN-4 AND FIBRINOGEN IN ENDOMETRIAL CANCER**

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**Introduction/Background**
Lack of a definitive biomarker for screening and diagnosis of endometrial cancer precludes early diagnosis and treatment and it can only be confirmed on histopathology in symptomatic women.

The aim of the present study was to examine the role of human epididymis protein 4 (HE4) and fibrinogen in endometrial cancer. The objectives were to estimate and compare the biomarker levels in endometrial cancer and benign endometrial pathology and correlate them with various clinicopathological parameters of endometrial malignancy.

**Methodology**
A total of 60 patients (30 cases and 30 controls) with endometrial cancer and benign endometrial pathology respectively were recruited in this case control study. HE4 and fibrinogen levels were estimated in both groups. The diagnostic value was assessed by a receiver operating curve, sensitivity, specificity, positive predictive value, negative predictive value and accuracy.

**Results**
The mean (SD) HE4 levels were significantly higher for cases compared to controls (371.14pmol/L (258.82) and 207.85pmol/L (179.26); (p=0.017). Similarly, the mean (SD) fibrinogen value for cases was 421.20mg/dL (156) and 251mg/dL (104.4) for controls (p=0.00). A combination of HE4 and fibrinogen fared better than either biomarker alone in diagnosing endometrial cancer (area under the receiver operating curve: HE4 and fibrinogen = 0.86, fibrinogen=0.81 and HE4=0.68). At a cut-off level of 239 pmol/L for HE4 and 342.5mg/dL for fibrinogen, the sensitivity was 60% and 73.33% respectively and specificity was 76.67% and 83.33%.

No statistically significant correlation was found between the values of these biomarkers and the pathological parameters.

**Conclusion**
Both HE4 and fibrinogen were significantly raised in endometrial cancer cases than controls. Combination of serum HE4 and plasma fibrinogen had highest accuracy while plasma fibrinogen fared better as a standalone marker to differentiate between benign and malignant histology.

**Disclosures**
Nil

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**Abstract #80**

**DISCLOSURE OF OUR LATEST DATA USING SENTINEL LYMPH NODE (SLN) FOR STAGING ALL ENDOMETRIAL CANCERS**

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**Introduction/Background**
SLN biopsy can be considered for staging in patients with low-risk/intermediate-risk disease and it is an acceptable alternative to lymphadenectomy for LN staging in stage I/II. LN staging should be performed in patients with high–intermediate-risk/high-risk disease. Four prospective cohort trials have shown high sensitivity to detect pelvic LN metastases and a high negative predictive value applying a SLN algorithm in high-risk/high-grade endometrial carcinomas. Our aim is present our prospective results in endometrial cancer applying new ESGO/ESMO/ESTRO recommendations for staging all endometrial cancers comparing them with our previous 333 patients data.

**Methodology**
A prospective observational study is being conducted since 1 January 2021 with patients that undergo laparoscopic surgery for endometrial cancer at our institution. We perform only SLN biopsy with dual cervical and fundal indocyanine green injection in all endometrial cancers. All SLNs were processed with an ultrastaging technique. Between 26 June 2014 and 31 December 2019 with 333 patients we applied the previous treatment algorithms. Between January and 30 August 2023 we did SNL in 117 patients.

**Results**
Comparaison of the results (ancient/new): Detection rate 94%/97.7% overall for SLNs; 91.3%/97.7% overall for pelvic SLNs; 70.5%/88.8% for bilateral SLNs; 68.1%/88.8% for paraaortic SLNs, and 2.9%/0% for isolated paraaortic nodal disease.

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**Abstract #80 Table 1**

Results table.
SLNs. Macrometastasis 18%/6% patients and micrometastasis 17.6%/8.8% patients, overall rate of LN involvement 16.2%/11%. Isolated Aortic metastases 4.2%/2.2% (14/333–1/117). Assuming the results of the ancient serie there was one false/negative (negative SLN with positive lymphadenectomy). Our sensitivity of detection was 98.3% (95% CI 91–99.7), specificity 100% (95% CI 98.5–100), negative predictive value 99.6% (95% CI 97.8–99.9), and positive predictive value 100% (95% CI 93.8–100).

Conclusion SLN biopsy with dual cervical and fundal indocyanine green injection is an acceptable alternative to systematic lymphadenectomy for LN staging in endometrial cancer stage I/II.

Disclosures With the new algorithm we avoid 22/45 (48.8%) lymphadenectomies, reducing the morbidity in our patients. Surgical times were shorter improving our theaters efficiency with all that implies for. Additionally, this technique allows a high rate of aortic detection, identifying a non-negligible percentage of isolated aortic metastases. Isolated Aortic metastases in endometrial cancer are possible and we should not give up actively looking for them.

#81 ASSOCIATION BETWEEN RECURRENCE, DEATH, AND AFTER OVARIAN PRESERVATION IN YOUNG WOMEN WITH EARLY-STAGE ENDOMETRIAL CANCER

Introduction/Background Endometrial cancer (EC) is the fifth most common type of cancer in women worldwide [(1)]. Global estimates of the increase in incidence, both in developed and developing countries, the indicators are almost the same [2)]. In many cases, the diagnosis is made in postmenopausal women, but 15–25% of patients are premenopausal, and 5% are younger than 40 years [3)].

Methodology This systemic review and meta-analysis is presented in accordance with the Multiple Admissions Regulations for Systemic Reviews and Meta-Analyses (PRISMA) and registered in the International Prospective Registry of Systemic Reviews (CRD number). We identified observational studies by searching PubMed, Medline (since 213), Embase (since 2013), Cochrane library (since 2015).

Results A US fixed effects model study found that of 3269 women identified, including 402 patients (12%) who had retained ovaries. As a result of the study of the multivariate Cox model showed that ovarian preservation did not affect either cancer-specific (hazard ratio [RR] = 0.58; 95% CI 0.14 to 2.44) or overall (RR = 0.68 ; 95% CI 0.34–1.35) survival.

Conclusion The current study showed that there was no significant difference in relapse-free survival between patients with preserved ovaries of stage IA and partially stage II and patients with bilateral salpingo ovariectomy. This study suggests that the preservation of ovaries in the early stages of endometrial cancer in premenopausal women after a full explanation of the possible risk of the disease and a thorough preoperative evaluation in rolna may be a safe choice. Interpretation of our results should take into account some shortcomings of this study. Firstly, the sample size was insufficient in some studies, and there was no significant difference in the recurrence rate between the ovarian preservation and BSO groups. Secondly, we did not separate laparotomy and laparoscopic treatments separately, we focused on the outcome of treatment.

Disclosures Searched Medline, Embase, Cochrane Library

#103 EPIGENETIC SILENCING OF MLH1 AS A PROGNOSTIC FACTOR FOR ENDOMETRIAL CANCER RECURRENCE

Introduction/Background Aberrant DNA methylation is a common phenomenon in different types of cancer, but its patterns, causes, and consequences are poorly defined. Promoter hypermethylation of the DNA mismatch repair (MLH1) gene has been implicated in prognosis of endometrial cancer (EC).

Methodology Fifty women diagnosed with endometrioid-type endometrial adenocarcinoma from 2018–2021 at the Institute of Oncology of Moldova were included in this study. DNA was isolated from plasma, formalin-fixed, paraffin-embedded tumor. The methylation status of the MLH1 gene was determined using the Methylation specific Polymerase Chain Reaction (MS-PCR) method and specific primers for both unmethylated and methylated fragments. (figure 1).

Results Clinical and pathological characteristics for the 50 endometrial cancer patients are summarized in table 1. The mean age of the cohort was 59,9 ± 6,4 years (range, 39–87), and most of the patients had early stage (Stage I or II), grade 2 tumors with less than 50% myometrial invasion. The mean tumor size was 4,2 cm and the mean depth of invasion 0,5cm. Myometrial lymphatic/vascular space and perineural invasion was present in nearly half the tumors and was much more common in stage II cases. Overall, 80% of the patients with EC had intact tumors, while 20% had hypermethylation of MLH1 (table 2). The presence of MLH1 epimutation was observed in 22.0% of EC patients in stage I and only in 2 patients in stage II.

Conclusion Recent developments in the field of epigenetics, especially studies of DNA methylation, have provided valuable insights for understanding the role of epigenetic alterations in normal cellular processes and abnormal changes leading to endometrial carcinogenesis. Promoter hypermethylation of MLH1 displayed a direct correlation with increasing age, poor differentiation of tumor, presense of myometral and lympho-vascular invasion. These phenotypes may underlie the different developmental pathways that are known to occur in endometrial cancer.