

SLNs: Macrometastasis 18%/6% patients and microdisease 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.

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

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**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 2013), 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:

ts:

**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 salpinx oophorectomy. 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

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

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**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) 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 ± 0,64 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, presence of myometrial and limpho-vascular invasion. These phenotypes may underlie the different developmental pathways that are known to occur in endometrial cancer.

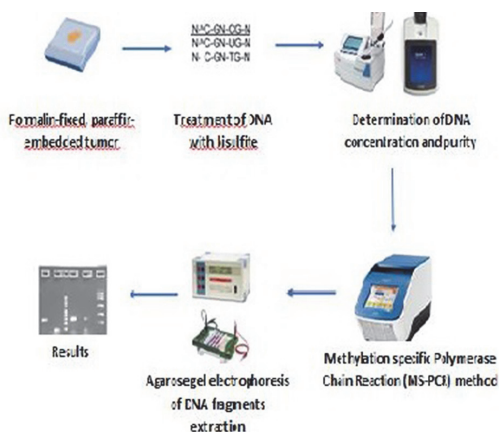
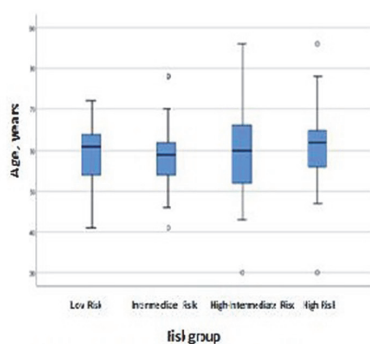


Fig. 1. Determination of methylation status of the MLH1 gene



Tab. 1. The mean age of patients from all risk groups, years

Age, years	Promoter hypermethylation of MLH1	
	Abs	%
30-39	-	-
40-39	2	200
50-39	3	300
60-69	5	500
70-39	0	0

Tab. 2. The mean age of patients with Promoter hypermethylation of MLH1, years

Abstract #103 Figure 1/Table 1, 2

Disclosures None

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**RISK FACTORS FOR SENTINEL LYMPH NODE METASTASIS IN ENDOMETRIAL CANCER (TRSGO-SLN-010)**

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**Introduction/Background** There is limited consensus on the optimal management approach for patients experiencing

mapping failure in endometrial cancer (EC). Understanding the risk factors that contribute to sentinel lymph node (SLN) metastasis is of paramount importance. This manuscript aims to provide a comprehensive analysis of the risk factors associated with SLN metastasis.

**Methodology** A total of 874 women with EC were included in this retrospective study. Out of the initial cohort of 874 patients, a total of 793 patients with successful SLN mapping were included and analysed to investigate the risk factors for SLN metastasis in EC.

**Results** SLN metastasis was detected in 73 (9.2%) patients. Among the metastatic cases, 20 (27.4%) patients had isolated tumour cells (ITC), 17 (23.3%) patients had micrometastasis, and 36 (49.3%) patients had macrometastasis in the sentinel lymph nodes. The results of the univariate analysis demonstrated a significant association between SLN metastasis and several factors, including age over 60 years, histology other than endometrioid, tumor grade 3, deep myometrial invasion, lymphovascular space invasion (LVSI), primary tumour diameter of 2 cm or larger, and cervical stromal invasion ( $p < 0.05$ ). At the end of multivariate analysis, deep myometrial invasion [odds ratio (OR), 2.42; 95% confidence interval (CI), 1.29-4.56;  $p = 0.006$ ], LVSI (OR, 7.27; 95% CI, 3.82-13.81;  $p < 0.001$ ) and cervical stromal invasion (OR, 2.18; 95% CI, 1.13-4.21;  $p = 0.020$ ) remained as independent risk factors for SLN involvement in women with EC.

**Conclusion** LVSI, deep myometrial invasion, and cervical stromal invasion emerged as independent risk factors for SLN metastasis in patients diagnosed with EC. In cases where the identified risk factors are absent, the omission of lymphadenectomy may be considered in instances of SLN mapping failure.

**Disclosures** The authors have no competing financial interests or conflicts of interest to disclose.

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**ROLE OF EXTRACELLULAR VESICLES IN EARLY DIAGNOSIS OF ENDOMETRIAL CANCER**

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**Introduction/Background** Extracellular vesicles are a class of cell-derived submicron particles, mediating cellular crosstalk through micro-RNA (miRNA). MiRNA are a group of RNA molecules, composed of 15-22 nucleotides each, post-transcriptionally regulating genes. Complementary mRNAs - into which miRNAs hybridise - are involved in implantation, tumour suppression, proliferation, angiogenesis, and metastatization defining tumour microenvironment. Despite endometrial biopsy being a standardized option to diagnose cellular atypia, non-invasive biomarkers may avoid discomfort of invasive procedures. The present study aims to evaluate distribution and regulation of differently expressed miRNAs (DEMs) in the context of endometrial cancer.

**Methodology** Following the recommendations in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement, we systematically searched PubMed, EMBASE, Scopus, Cochrane Library, and Science Direct databases in April 2023, adopting the string 'Endometrial Neoplasms AND Exosomes'. We selected studies including patients with endometrial cancer, describing miRNA regulation in that