Results Of the 177 patients who meet the inclusion criteria, 83 underwent SLN biopsy and 94 cases were staged with systematic LMP. The median follow-up was 36 months (12–46). No significant differences in median age (p=0.439), median BMI (0.268), FIGO stage (p=0.164), and adjuvant therapy (p=0.775) were found in the two groups. Thirty-two recurrences were registered (14 in the SLN and 18 in the LMP group) and 15 cancer-related deaths were reported (8 in the SLN and 7 in the LMP group). One-year OS was 100 vs. 100%, 2-year OS was 94 vs. 95%, and 3-years OS was 92 vs. 93% in groups 1 and 2, respectively (hazard ratio 0.73, Confidence Intervall 95% 0.26–2.00, p=0.54). One-year DFS was 96.4 vs. 97.9%, 2-years DFS was 85.2 vs. 86.7%, and 3-year DFS was 83.4 vs. 83.2 in groups 1 and 2, respectively (hazard ratio 1.01, Confidence Intervall 95% 0.48–2.13, p=0.97). **Conclusion** SLN biopsy shows long-term survival outcomes superimposable to systematic LMP in HREC patients.

INTRODUCTION OF A SENTINEL LYMPH NODE PROTOCOL FOR ENDOMETRIAL CANCER AT A REGIONAL CANCER CENTER IN UK

Fatma Mohamed AlWahaibi, Emma McCorkindale, Hans Nagar, Stephen Dobbs, Mark McComiskey, Elaine Craig, Ian Harley. *Gynecology Oncology, Belfast City Hospital, Belfast, United Kingdom*

Introduction/Background Lymphadenectomy in endometrial cancer (EC) is one of the controversial topic in gynecologic oncology. Sentinel lymph node (SLN) has become a popular option in the last few years .Belfast City Hospital – Regional Cancer Center in United Kingdom started using SLN since 2021. The aim of this study is to develop a protocol for SLN to standardize the practice in the center.
Methodology Retrospective cohort of EC patients with apparently early stage EC undergoing surgical staging with SLN were analyzed from January 2021 onward . All patients with high grade, early stage EC were included .The primary outcome was to assess the overall, bilateral successful and unsuccessful SLN mapping. Secondary outcome was identifying the predictors for mapping failure and adverse events.
Results Total of 286 patients with EC diagnosed since January 2021 were analyzed. Seventeen patients were diagnosed as high grade, early stage of EC. However, two were morbidly obese and unfit for SLN. Mean age 69.4 range (53–81 years) including 7 patients with high grade endometrioid adenocarcinoma, 4 with carciosarcoma, 3 with serous carcinoma and 1 with clear cell carcinoma. Mean body mass index (BMI) was 27.5 (calculated as weight in Kilogram divided by height in meters squared) range (22–36). Regarding detection rate; the successful bilateral mapping, at least successful unilateral mapping and the mapping failure of SLN (60%, 80%, 20%) respectively. No major adverse events were recorded. The advanced age affects the anatomical distribution of SLN. Non endometrioid histotype and lymph vascular space invasion (LVSI) represent independent predictor of unsuccessful mapping.
Conclusion SLN is an available option for surgical staging of EC with markedly less complications compared to full lymphadenectomy . We consider all the major factors which might cause failure of SLN during preparation of a protocol in our center.

PROSPECTIVE MULTICENTER TRIAL ASSESSING THE IMPACT OF POSITIVE PERITONEAL CYTOLOGY CONVERSION ON ONCOLOGICAL OUTCOME IN ENDOMETRIAL CANCER PATIENTS UNDERGOING MINIMALLY INVASIVE SURGERY WITH THE USE OF AN INTRAUTERINE MANIPULATOR

[1]Franziska Siegenthaler, [2]Silke Johann, [1]Sara Imboden, [3]Nicolas Samartzis, [4]Haiyan Ledermann-Liu, [4]Dimitri Sarlos, [3]Markus Eberhard, [1]Michael David Mueller. [1]*Department of Obstetrics and Gynecology, Bern University Hospital and University of Bern, Bern, Switzerland*; [2]*Department of Obstetrics and Gynecology, Spitalzentrum Oberwallis, Standort Visp, Visp, Switzerland*; [3]*Department of Gynecology and Obstetrics, Canton Hospital Schaffhausen, Schaffhausen, Switzerland*; [4]*Department of Obstetrics and Gynecology, Canton Hospital Aarau, Aarau, Switzerland*

Introduction/Background Minimally invasive surgery is the standard approach in early-stage endometrial cancer according to evidence showing no compromise in oncological outcomes but lower morbidity compared to open surgery. However, there is limited data available on the oncological safety of the use of intrauterine manipulators in endometrial cancer.
**Methodology** This prospective multicenter study included endometrial cancer patients undergoing laparoscopic staging surgery with the use of an intrauterine manipulator. We obtained three different sets of peritoneal washings: at the beginning of the surgical procedure, after the insertion of the intrauterine manipulator and after the closure of the vaginal vault. The rate of positive peritoneal cytology conversion and its association with oncological outcomes was assessed (figure 1).

Abstract 2022-RA-886-ESGO Table 1 Clinicopathological characteristics among the different study groups

	Total N= 124	Group 1 N= 98	Group 2a N= 16	Group 2b N= 10	P-Value
Mean age at surgery, *years ± SD*	66.1 ±10.0	66.3±10.1	63.6±9.4	68.0±9.4	.495
Mean BMI, *kg/m² ± SD*	29.5±8.1	30.1 ±8.3	28.2 ±7.5	28.2 ±7.5	.266
History of tubal sterilization, *N (%)*	16 (12.9)	13 (13.3)	2 (12.5)	1 (10.0)	.957
Preoperative hysteroscopy, *N (%)*	79 (63.7)	64 (65.3)	9 (56.3)	6 (60.0)	.759
Surgical lymph node staging performed, *N (%)*	95 (76.6)	76 (77.6)	14 (87.5)	5 (50.0)	.080
High-grade histology, *N (%)*	31 (25.0)	23 (23.5)	7 (43.8)	1 (10.0)	.014
Advanced FIGO stage (III/IV), *N (%)*	20 (16.1)	11 (11.2)	7 (43.8)	2 (20.0)	.020
Positive lymph node status, *N (%)*	15 (12.1)	8 (8.2)	7 (43.8)	0 (0.0)	<.001
Endometrioid histology, *N (%)*	109 (87.9)	86 (87.8)	13 (81.3)	10 (100)	.317
LVSI positivity, *N (%)*	26 (21.0)	15 (15.3)	8 (50.0)	3 (30.0)	.021
Adjuvant treatment performed, *N (%)*	66 (53.2)	49 (50.0)	13 (81.2)	4 (40)	.145

Results 124 patients were included. Clinicopathological data are provided in Table 1, mean follow-up was 120.7 (95% CI 116.2–125.2) months. Peritoneal cytology was negative in 98 (group 1) and positive in 26 patients (group 2). In group 2

sixteen patients presented with positive cytology at the beginning of the surgery (group 2a) and ten patients had positive cytology conversion during the procedure (group 2b). Group 1 showed the best recurrence-free survival, followed by group 2a, patients in group 2b had the worst oncological outcomes (log-rank, P= .002). In multivariable Cox regression analysis including myometrial invasion, FIGO stage, and nodal status, peritoneal cytology remained an independent predictor of both recurrence (HR 4.15, 95% CI 1.501 – 11.482, P= .006) and death (HR 2.92, 95% CI 1.218- 6.980, P= .016).
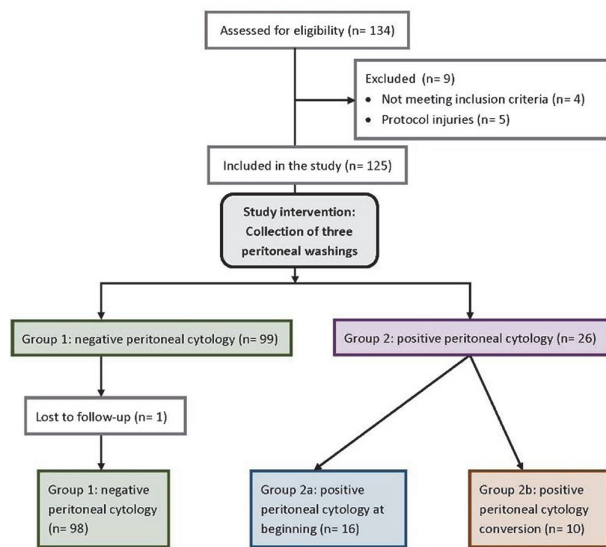
Abstract 2022-RA-886-ESGO Figure 1

Conclusion 8.1% of endometrial cancer patients undergoing minimally invasive surgery with intrauterine manipulation showed positive peritoneal cytology conversion associated with significantly worse oncological outcome.

2022-RA-888-ESGO

ROLE OF PREOPERATIVE DETERMINATION OF MOLECULAR CLASSIFICATION ON ENDOMETRIAL BIOPSY IN PREOPERATIVE ALLOCATION INTO A RISK CATEGORY IN ENDOMETRIAL CANCER

[1]Laura Cárdenas Puiggrós, [1]Pedro Alberto Corzo Orantos, [1]Anna Taltavull Pons, [1]Isabel Núñez Márquez, Rocio Garcia Berrio[2]Cristina Meléndez Muñoz, [3]Pilar Barretina Ginesta, [4]Hugo Javier Rosales González, [1]Eduard Sala Hernández, [1]Elena Álvarez Castaño. [1]Gynaecological Oncology Unit, Dr. Josep Trueta University Hospital, Girona, Spain; [2]Pathology Department, Dr. Josep Trueta University Hospital, Girona, Spain; [3]Medical Oncology, Catalan Institute of Oncology, Girona, Spain; [4]Radiation Oncology, Catalan Institute of Oncology, Girona, Spain

Introduction/Background Traditional risk classification in endometrial cancer was based on clinicopathological data. Preoperative assessment is used to tailor the extend of surgery. The TCGA surrogate has been recently incorporated into risk stratification by ESGO-ESTRO-ESP guidelines. The aim of this study is to evaluate if preoperative determination of molecular classification is feasible and can improve preoperative estimation of risk group.

Methodology In this retrospective cohort study, we identified all newly clinical early-stage endometrial cancer cases operated between January 2021 and April 2022. All cases had preoperative MRI and endometrial biopsy where molecular classification was done. Patients were allocated to a risk group based on 2021 ESGO-ESTRO-ESP guidelines by three Methods using only preoperative clinicopathological data, using preoperative molecular and clinicopathological data, using postoperative molecular and clinicopathological data.

Results 55 cases were included. In all cases molecular classification was done preoperative while the patient was in waiting list. In figure 1, concordance between preoperative and postoperative assessment is shown.
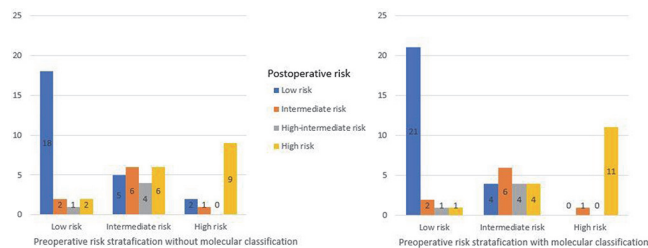
Abstract 2022-RA-888-ESGO Figure 1 Relation between preoperative and postoperative risk assessment

When molecular classification is only taken account postoperatively, the Cohen's kappa coefficient for the concordance is 0.37 (95% CI= 0.20–0.54) and risk was underestimated in 16/55 (29.1%) and overestimated in 8/55 (14.5%). If molecular classification is added to preoperative assessment, the Cohen's kappa coefficient is 0.54 (95% CI= 0.38–0.70) and risk was underestimated in 12/55 (21.9%) and overestimated in 5/55 (10.0%). Overall agreement between preoperative and postoperative assessment for hystotype was 89.1%, for grade was 74.5%, and between radiologic and definitive stage was 74.5%.

Conclusion Preoperative determination of molecular classification is feasible and seems to increase the reliability of preoperative risk stratification. However, in around 22% of cases risk is still underestimated leading to inadequate surgery strategy. Sentinel lymph node biopsy can elegantly overcome this problem by providing information on the lymph node status with minimal morbidity and its implementation should be encouraged.

2022-RA-904-ESGO

VAGINAL CUFF BRACHYTHERAPY IN INTERMEDIATE AND INTERMEDIATE HIGH RISK ENDOMETRIAL CANCERS AFTER HYSTERECTOMY: CLINICAL OUTCOMES

[1]Abel Cordoba, [1]Alexandre Escande, [1]Cyrielle Scournec, [2]Fabrice Narducci, [2]Carlos Martinez, [2]Eric Leblanc, [2]Delphine Hudry, [3]Camille Pasquesoone, [4]Sophie Taieb, [1]Xavier Mirabel, [1]Eric Lartigau, [1]Florence Le Tinier. [1]Academic Department of Radiation Oncology and Brachytherapy, Centre Oscar Lambret, Lille, France; [2]Department of Surgical Oncology, Centre Oscar Lambret, Lille, France; [3]Department of pathology, Centre Oscar Lambret, Lille, France; [4]Department of Medical Imaging, Centre Oscar Lambret, Lille, France

Introduction/Background Vaginal cuff brachytherapy is the recommended adjuvant treatment for patients operated on for endometrial cancer classified as intermediate risk for