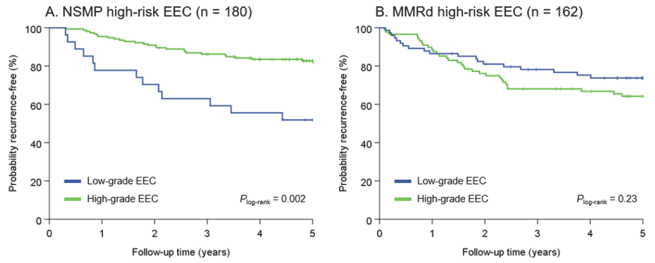
(n=40/45, 88.9% and n=38/46, 82.6%, respectively), while NSMP EC were mostly low-grade (n=153/180, 85.0%). Within MMRd EEC there was an equal distribution between low- and high-grade (n=88/162, 54.3% and n=74/162, 45.7%, respectively). 5-year overall recurrence was significantly lower for patients with high-grade NSMP EEC (82.7% versus 51.9%; p=0.002; figure 1A). High-grade MMRd EEC had a slightly lower risk of recurrence than low-grade MMRd EEC, but this did not reach statistical significance (figure 1B). No significant differences in risk of recurrence was observed in *POLE*mut and p53abn EEC. Multivariable analysis confirmed independent unfavorable prognostic impact of high-grade within NSMP EEC, but not in MMRd EEC (table 1).



Abstract 2022-RA-568-ESGO Figure 1 Kaplan-Meier survival analysis demonstrating the time to recurrence for FIGO grading in high-risk endometrioid endometrial cancers (EC) molecularly classified as no specific molecular profile (NSMP) and mismatch repair deficient (MMRd)

Conclusion FIGO grading showed independent prognostic value in high-risk NSMP EEC, but not in *POLE*mut, MMRd or p53abn EEC. Our findings suggest that prognostic value of grading in EEC is limited to the NSMP molecular subgroup. Future studies should clarify whether this holds up in (low-) intermediate-risk EEC.

2022-RA-575-ESGO DISCLOSURE OF OUR LATEST DATA USING SENTINEL LYMPH NODEFOR STAGING ALL ENDOMETRIAL CANCERS

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10.1136/ijgc-2022-ESGO.215

Introduction/Background 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 2021 we did only SNL in 45 patients.
Results Comparation of the results between the ancient and the new serie (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 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% (14/333–1/45). 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 is an acceptable alternative to systematic lymphadenectomy for LN staging in stage I/II. We avoid 22/45 (48.8%) lymphadenectomies with new algorithm, reducing the morbidity in our patients. Our 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.

2022-RA-580-ESGO ENDOMETRIAL CANCER DETECTION BY DNA METHYLATION TESTING IN CERVICAL SCRAPES, CERVICOVAGINAL SELF-SAMPLES AND URINE

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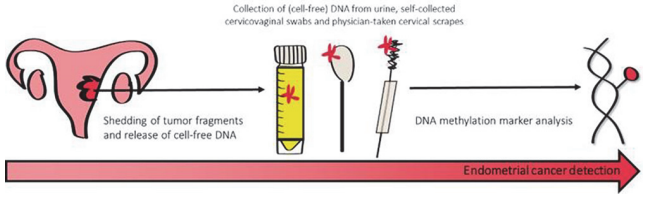
10.1136/ijgc-2022-ESGO.216

Introduction/Background The incidence of endometrial cancer is rising and current diagnostics often require invasive biopsy procedures. Molecular biomarkers have proven their potential to detect gynecological cancer in minimally- and non-invasive sample types. Here, we set out to determine and compare the performance of DNA methylation biomarkers to detect endometrial cancer in prospectively collected urine samples, self-collected cervicovaginal swabs, and clinician-taken cervical scrapes.
Methodology Paired urine samples, self-collected cervicovaginal swabs, and cervical scrapes were collected from 103 women diagnosed with endometrial cancer. Women without disease served as controls. All samples were tested for nine DNA methylation markers.
Results In all sample types, methylation levels were significantly increased in patients compared to controls. A moderate to strong correlation was found between the paired samples. Urine showed superior diagnostic performance, with an area under the receiver operating curve (AUC) above 0.80 for seven out of nine markers. The most optimal three-marker combination yielded an AUC value of 0.97 for endometrial cancer detection in urine, corresponding to a sensitivity of 87% and a specificity of 99%.



Abstract 2022-RA-580-ESGO Figure 1

Conclusion This study indicates that DNA methylation analysis in urine samples, self-collected cervicovaginal swabs, and clinician-taken cervical scrapes allows endometrial cancer detection with high accuracy. Our results demonstrate the potential of methylation testing in self-collected material as a novel diagnostic strategy to detect endometrial cancer.

2022-RA-585-ESGO COME BACK TO THE FUTURE: THE IMPACT OF ESTROGEN RECEPTOR PROFILE IN THE ERA OF MOLECULAR ENDOMETRIAL CANCER CLASSIFICATION

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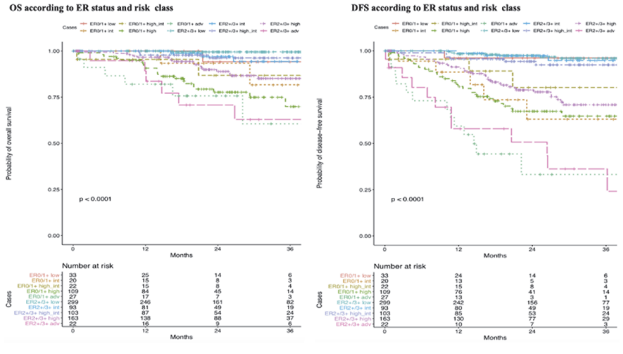
10.1136/ijgc-2022-ESGO.217

Introduction/Background The estrogens receptor (ER) expression in endometrial cancer (EC) is known to be associated with prognosis. However, its role was not included in the latest molecular risk classification system. The aim of this study is to assess the impact of ER profile on oncological outcomes in the new EC risk classification.

Methodology Retrospective IHC analyses were conducted in a large series of ECs, studying the presence/absence of hormone receptors and other molecular (i.e p53 and mismatch mutational status), histopatological and clinical outcome. The ER status was correlated with molecular, histological, clinical and prognostic data.



Abstract 2022-RA-585-ESGO Figure 1

Results 891 EC-patients were included in the study (211 ER-negative and 680 ER-positive). The ER-negative phenotype was linked with an unfavorable pathologic-clinical profile (grading, histotype, LVSI, stages, etc) and with high and advanced risk class (64.5vs 27%) ($p<0.05$). Molecular analysis in ER-negative compared to ER-positive showed greater p53-mutation rate (39% vs 10%), similar MMR-deficiency (20% vs 23.5%), fewer MMR-stability (38% vs 65%) (table1). Noteworthy, simple regression demonstrated that ER-negativity was related to worse OS and DFS, regardless of p53 status; whereas for ER-positive, the prognosis was strongly associated to molecular status ($p<0.05$). When associated to risk classes, ER-negative EC patients had the worst outcomes compared to the ER-positive counterparts, especially for intermediate, high-intermediate and high-risk classes ($p<0.05$) (figure1).

Abstract 2022-RA-585-ESGO Table 1

Characteristic	ER0/1+ (N=211)	ER2+/3+ (N=680)	Total (N=891)	p value
Age				0.336
Mean (SD)	63.621 (10.825)	62.776 (11.229)	62.976 (11.134)	
Range	35.000 - 87.000	25.000 - 89.000	25.000 - 89.000	
BMI				0.020
Mean (SD)	28.747 (7.832)	30.242 (8.263)	29.888 (8.183)	
Range	17.200 - 75.300	16.000 - 121.000	16.000 - 121.000	
Stage_def				<0.001
IA	77 (36.5%)	356 (52.4%)	433 (48.6%)	
IB	48 (22.7%)	148 (21.8%)	196 (22.0%)	
II	14 (6.6%)	46 (6.8%)	60 (6.7%)	
IIIA	3 (1.4%)	17 (2.5%)	20 (2.2%)	
IIIB	4 (1.9%)	9 (1.3%)	13 (1.5%)	
IIIC1	29 (13.7%)	64 (9.4%)	93 (10.4%)	
IIIC2	7 (3.3%)	14 (2.1%)	21 (2.4%)	
IVA	2 (0.9%)	4 (0.6%)	6 (0.7%)	
IVB	27 (12.8%)	22 (3.2%)	49 (5.5%)	
Risk_class_2020				<0.001
low	33 (15.6%)	299 (44.0%)	332 (37.3%)	
intermediate	20 (9.5%)	93 (13.7%)	113 (12.7%)	
high intermediate	22 (10.4%)	103 (15.1%)	125 (14.0%)	
high	109 (51.7%)	163 (24.0%)	272 (30.5%)	
advanced/metastatic	27 (12.8%)	22 (3.2%)	49 (5.5%)	
Grading				<0.001
G1-2	71 (33.6%)	526 (77.4%)	597 (67.0%)	
G3	140 (66.4%)	154 (22.6%)	294 (33.0%)	
Histotype				<0.001
Endometrioid	104 (49.3%)	593 (87.2%)	697 (78.2%)	
Serous	50 (23.7%)	49 (7.2%)	99 (11.1%)	
Clear cell	5 (2.4%)	0 (0.0%)	5 (0.6%)	
Carcinosarcoma	14 (6.6%)	7 (1.0%)	21 (2.4%)	
Undifferentiated	11 (5.2%)	3 (0.4%)	14 (1.6%)	
Mixed	27 (12.8%)	28 (4.1%)	55 (6.2%)	
LVSI				<0.001
Miss	1	1	2	
negative	99 (47.1%)	452 (66.6%)	551 (62.0%)	
positive	111 (52.9%)	227 (33.4%)	338 (38.0%)	
Myometrial_invasion				0.002
Miss	2	1	3	
no	14 (6.7%)	48 (7.1%)	62 (7.0%)	
≤ 50%	88 (42.1%)	374 (55.1%)	462 (52.0%)	
> 50%	107 (51.2%)	257 (37.8%)	364 (41.0%)	
Dim_class				0.081
not applicable	0 (0.0%)	4 (0.6%)	4 (0.4%)	
≤ 20 mm	34 (16.1%)	151 (22.2%)	185 (20.8%)	
>20 mm	177 (83.9%)	525 (77.2%)	702 (78.8%)	
Dim_mm				<0.001
Miss	1	4	5	
Mean (SD)	44.167 (27.422)	34.812 (18.865)	37.029 (21.561)	
Range	3.000 - 190.000	1.000 - 140.000	1.000 - 190.000	
pN				0.001
negative	171 (81.0%)	609 (89.6%)	780 (87.5%)	
positive	40 (19.0%)	71 (10.4%)	111 (12.5%)	
CHT				<0.001
no	82 (38.9%)	474 (69.7%)	556 (62.4%)	
yes	129 (61.1%)	206 (30.3%)	335 (37.6%)	
Adv_RT				<0.001
no	105 (49.8%)	456 (67.1%)	561 (63.0%)	
yes	106 (50.2%)	224 (32.9%)	330 (37.0%)	
MMR_p53				<0.001
MMRs	81 (38.4%)	441 (64.9%)	522 (58.6%)	
MMRd	43 (20.4%)	160 (23.5%)	203 (22.8%)	
p53mut	82 (38.9%)	69 (10.1%)	151 (16.9%)	

Conclusion We demonstrated that the ER status has a significant impact on oncological outcomes, regardless of risk class and p53/MMR status. On these bases, we advise to include ER assessment in featured EC risk classification system.

2022-RA-612-ESGO IMPROVING ENDOMETRIAL CANCER ASSESSMENT BY COMBINING THE NEW TECHNIQUE OF GENOMIC PROFILING WITH SURGICAL EXTRA UTERINE DISEASE ASSESSMENT. AN INTRODUCTION TO EUGENIE

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