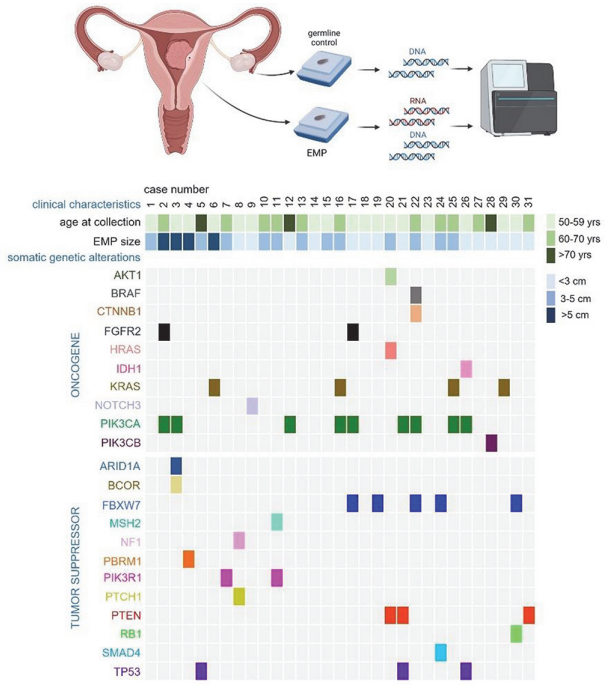
present in the epithelial compartment at low allelic frequencies.



Abstract 2022-RA-460-ESGO Figure 1

Conclusion These results establish a link between EMPs and the acquisition of endometrial cancer driver mutations. Based on these findings, we propose a model where the association between EMPs and endometrial cancer is explained by the age-related accumulation of endometrial cancer drivers in a protected environment that—unlike normal endometrium—is not subject to cyclical shedding. Our results also provide further justification for hysteroscopic removal of endometrial polyps, when clinically feasible.

2022-RA-568-ESGO PROGNOSTIC RELEVANCE OF FIGO GRADING IS LIMITED TO NSMP ENDOMETRIAL CANCERS

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Introduction/Background FIGO grading of endometrioid-type endometrial cancers (EEC) is standard clinical practice. Upon the incorporation of the molecular classification in the risk-assessment of EC patients, the role of grading is debated. Here, we assessed the prognostic value of grading in molecularly classified high-risk EC (HREC).

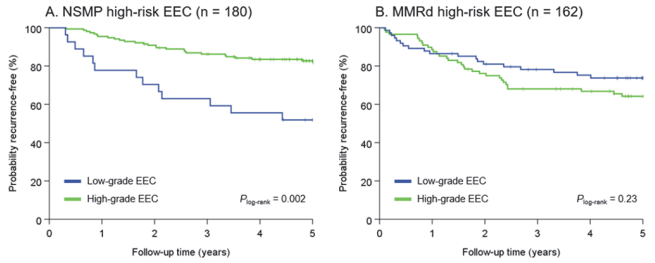
Methodology A total of 670 HREC patients from the PORTEC-3 clinical trial (n=424), and a prospective clinical cohort from Medisch Spectrum Twente in the Netherlands (n=246), were used for this study. Cases were molecularly classified following the 2020 WHO diagnostic algorithm (*POLE*-mutated [*POLE*mut], mismatch repair deficient [MMRd], no specific molecular profile [NSMP] and p53-abnormal [p53abn] EC). The Kaplan-Meier method, log-rank test and prespecified multivariable Cox proportional-hazard models were used for the assessment of time-to-overall-recurrence by molecular subgroup and grade.

Results In total, 433 EEC were identified, including 254 (58.7%) low-grade and 179 (41.3%) high-grade EEC. *POLE*mut and p53abn EEC were predominantly high-grade

Abstract 2022-RA-568-ESGO Table 1 Multivariable analysis including risk factors for recurrence in NSMP and MMRd high-risk EEC

	NSMP EEC				MMRd EEC			
	48 events				50 events			
	Total n	HR	95% CI	p-value	Total n	HR	95% CI	p-value
Age	180	1.016	0.986–1.047	0.31	162	1.033	1.001–1.067	0.044
FIGO grade								
Low-grade	153	1	-	-	88	1	-	-
High-grade	27	2.673	1.347–5.302	0.005	74	0.801	0.439–1.461	0.47
Stage								
I-II	85	1	-	-	87	1	-	-
III	95	1.712	0.907–3.230	0.10	75	2.248	1.213–4.166	0.010
LVSI								
Absent	109	1	-	-	76	1	-	-
Present	71	1.603	0.862–2.981	0.14	86	0.896	0.499–1.608	0.71
Treatment								
RT	118	1	-	-	108	1	-	-
CTRT	62	0.505	0.256–0.998	0.049	53	1.152	0.624–2.126	0.65

(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%.