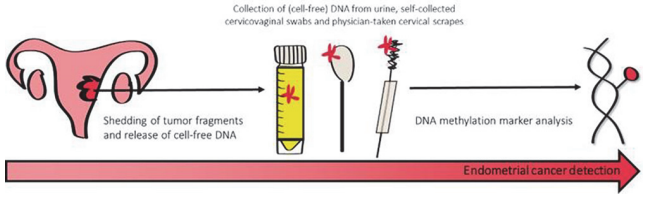

Abstract 2022-RA-580-ESGO Figure 1

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

[1]Emanuele Perrone, [2]Ilaria Capasso, [3]Francesca de Felice, [1]Giorgia Dinoi, [1]Niccolo Bizzarri, [4]Aniello Foresta, [1]Domenica Lorusso, [1]Giovanni Scambia, [1]Francesco Fanfani. *[1]Gynecologic Oncology Unit, Dipartimento per le Scienze della Salute della Donna del Bambino e di San, Fondazione Policlinico Universitario A. Gemelli IRCCS, Rome, Italy; [2]Dipartimento per le Scienze della Salute della Donna del Bambino e di Sanità Pubblica, Università Cattolica del Sacro Cuore, Rome, Italy; [3]Policlinico Umberto I, Rome, Italy; [4]Università Cattolica del Sacro Cuore, Rome, Italy*

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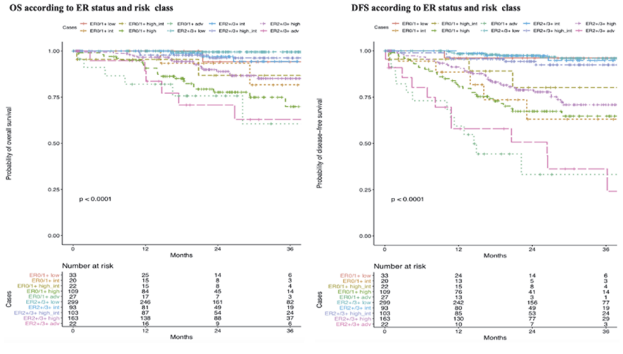
Introduction/Background The estrogens receptor (ER) expression in endometrial cancer (EC) is known to be associated with prognosis. However, its role was not included in the latest molecular risk classification system. The aim of this study is to assess the impact of ER profile on oncological outcomes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

[1]Frédéric Amant, [2]Rita Trozzi, [3]Thais Baert, [4]Jenneke C Kasius, [5]Johanna MA Pijnenborg, [2]Francesco Fanfani. *[1]Department of Oncology, KU Leuven, Leuven, Belgium; Department of Gynecology, Antoni van Leeuwenhoek – Netherlands Cancer Institute; Center for Gynecological Oncology Amsterdam (CGOA), Amsterdam, Netherlands; [2]Department of Woman, Child and Public Health, Fondazione Policlinico Universitario A. Gemelli IRCCS, Università Cattolica del Sacro Cuore, Rome, Italy; [3]Division of Gynecology and Obstetrics, UZ Leuven, Leuven, Belgium; [4]Department of Obstetrics and Gynaecology, Amsterdam University Medical Centres, Amsterdam, Netherlands; [5]Department of Obstetrics and Gynaecology, Radboud University Medical Center, Nijmegen, Netherlands*

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