

Characteristic	Adnexa n=139	Serosa n=40	Serosa + Adnexa n=6	AO vs SO P value [†]	AO vs SA P value [†]	SO vs SA P value [†]
Age, years (median, range)	58 (23-83)	66 (51-89)	71 (58-76)	<0.001	0.015	0.443
Histology (n, %)				0.235	0.009	0.003
Endometrioid	89 (64.0)	25 (62.5)	1 (16.7)			
Serous	20 (14.4)	8 (20.0)	0			
Clear Cell	5 (3.6)	0	1 (16.7)			
Carcinosarcoma	8 (5.8)	5 (12.5)	2 (33.3)			
Mixed/Other	17 (12.2)	2 (5.0)	2 (33.3)			
FIGO Endometrioid Grade (n, %)				0.007	0.501	0.113
1	37/89 (41.6)	4/25 (16.0)	1/1 (100)			
2	35/89 (39.3)	9/25 (36.0)	0			
3	17/89 (19.1)	12/25 (48.0)	0			
Lymphovascular Space Invasion* (n, %)				0.004	0.305	0.866
Negative	84/134 (62.7)	13/36 (36.1)	2/5 (40.0)			
Positive	50/134 (37.3)	23/36 (63.9)	3/5 (60.0)			

Supplementary Table 1. Two group comparisons amongst significant clinicopathologic characteristics of patients with full-thickness serosa, adnexa, or combined full thickness serosa with adnexa involvement of endometrial carcinoma.

[†]Kruskal-Wallis P values reported for continuous variables, and chi-square P value reported for categorical variables.

*LVTI was not documented for 10 patients.

AO: adnexa involvement only, SO: serosa involvement only, SA: combined adnexa and serosa involvement, FIGO: International Federation of Gynecology and Obstetrics.

Characteristic	Adnexa n=139	Serosa n=40	P value [†]
Age, years (median, range)	58 (23-83)	66 (51-89)	<0.001
BMI, kg/m² (median, range)	29.2 (19.0-55.2)	28.0 (18.0-65.9)	0.371
Surgical Approach (n, %)			0.300
Open	72 (51.8)	17 (42.5)	
Minimally Invasive	67 (48.2)	23 (57.5)	
Histology (n, %)			0.235
Endometrioid	89 (64.0)	25 (62.5)	
Serous	20 (14.4)	8 (20.0)	
Clear Cell	5 (3.6)	0	
Carcinosarcoma	8 (5.8)	5 (12.5)	
Mixed/Other	17 (12.2)	2 (5.0)	
FIGO Endometrioid Grade (n, %)			0.007
1	37/89 (41.6)	4/25 (16.0)	
2	35/89 (39.3)	9/25 (36.0)	
3	17/89 (19.1)	12/25 (48.0)	
Peritoneal Washings* (n, %)			0.410
Negative	67/114 (58.8)	20/29 (69.0)	
Positive	42/114 (36.8)	7/29 (24.1)	
Suspicious	5/114 (4.4)	2/29 (6.9)	
Cervical Involvement** (n, %)			0.217
None	107 (77.0)	31/39 (79.5)	
Mucosa	17 (12.2)	7/39 (17.9)	
Stroma +/- Mucosa	15 (10.8)	1/39 (2.6)	
Lymphovascular Space Invasion*** (n, %)			0.004
Negative	84/134 (62.7)	13/36 (36.1)	
Positive	50/134 (37.3)	23/36 (63.9)	
Lymph Node Technique (n, %)			0.405
SLN	28 (20.1)	12 (30.0)	
PLND +/- PALND	97 (69.8)	25 (62.5)	
SLN + PLND	14 (10.1)	3 (7.5)	
Adjuvant Treatment (n, %)			0.727
Radiation Alone	57 (41.0)	18 (45.0)	
Chemotherapy Alone	39 (28.0)	11 (27.5)	
Chemoradiation	34 (24.5)	7 (17.5)	
Surgery Alone	9 (6.5)	4 (10.0)	

Supplementary Table 2. Clinicopathologic characteristics of patients with full-thickness serosa, adnexa, or combined full thickness serosa with adnexa involvement of endometrial carcinoma.

[†]Kruskal-Wallis *P* values reported for continuous variables and chi-square *P* value reported for categorical variables.

*Peritoneal washings were not collected for 36 patients.

**Cervical involvement was not documented for 1 patient.

***LVSIs was not documented for 10 patients.

BMI: body mass index, FIGO: International Federation of Gynecology and Obstetrics, SLN: sentinel lymph node, PLND: pelvic lymph node dissection, PALND: paraaortic lymph node dissection.

	Adnexa n=139	Serosa n=40	Serosa + Adnexa n=6
Adjuvant Treatment Type (n, %)			
Surgery alone	9 (6.5)	4 (10.0)	0
Chemotherapy alone	39 (38.1)	11 (27.5)	2 (33.3)
VBT alone	10 (7.2)	5 (12.5)	1 (16.7)
EBRT alone	46 (33.1)	11 (27.5)	2 (33.3)
EBRT + VBT	1 (0.7)	2 (5.0)	0
Chemotherapy + VBT	25 (18.0)	1 (2.5)	1 (16.7)
Chemotherapy + EBRT	5 (3.6)	2 (5.0)	0
Chemotherapy + EBRT + VBT	4 (2.9)	4 (10.0)	0

Supplementary Table 3. Detailed treatment modalities for patients with full-thickness serosa, adnexa, or combined full-thickness serosa with adnexa involvement of endometrial carcinoma. VBT: vaginal brachytherapy, EBRT: external beam radiation therapy.

	MSKCC n=75	Mayo n=38	Oslo n=31	Essen n=21	MDACC n=20
Adjuvant Treatment Type (n, %)					
Radiation Alone	67 (89.3)	6 (15.8)	2 (6.5)	2 (9.5)	1 (5.0)
Chemotherapy Alone	6 (8.0)	8 (21.1)	26 (83.9)	8 (38.1)	4 (20.0)
Chemoradiation	0	22 (57.9)	0	5 (23.8)	15 (75.0)
Surgery Alone	2 (2.7)	2 (5.3)	3 (9.7)	6 (28.6)	0

Supplementary Table 4. Treatment modalities for all patients Stage IIIA endometrial carcinoma included in this study, stratified by institution. MSKCC: Memorial Sloan Kettering Cancer Center, Mayo: Mayo Clinic, Oslo: University of Oslo, Essen: Kliniken Essen-Mitte, MDACC: The University of Texas MD Anderson Cancer Center

Total percentage count may not add to 100% due to rounding.

Characteristic	Total	Univariate HR (95% CI)	P value	Multivariate HR (95% CI)	P value
Tumor Dichotomization					
Adnexa only	139	Reference	0.033	Reference 2.7 (1.4, 5.2)	0.002
Serosa only	40	2.0 (1.0, 3.8)			
Histology					
Endometrioid	114	Reference	0.004	Reference 2.7 (1.4, 5.3)	0.003
Non-endometrioid	65	2.4 (1.6, 4.5)			
Peritoneal Washings*					
Negative	87	Reference	0.411	-	
Positive	49	1.3 (0.7, 2.6)			
Suspicious	7	0.4 (0.5, 2.8)			
Cervical Involvement**					
None	138	Reference	0.999	-	
Mucosa	24	1.0 (0.4, 2.5)			
Stoma +/- Mucosa	16	1.0 (0.3, 2.8)			
Lymphovascular Space Invasion***					
Negative	97	Reference	<0.001	Reference 2.2 (1.1, 4.3)	0.027
Positive	73	3.1 (1.6, 6.0)			
Adjuvant Treatment (n, %)					
Radiation Alone	75	Reference	0.105	-	
Chemotherapy Alone	50	0.4 (0.2, 0.9)			
Chemoradiation	41	0.6 (0.3, 1.4)			
Surgery Alone	13	0.5 (0.1, 2.1)			

Supplementary Table 5. Univariate and multivariate analyses for the association with recurrence among patients with adnexa only or serosa with or without adnexal involvement.

*Peritoneal washings were not collected for 36 patients.

**Cervical involvement was not documented for 1 patient.

***LVSI was not documented for 9 patients.

CI: confidence interval, HR: hazard ratio

FIGO 1971	FIGO 1988	FIGO 2009	FIGO 2023
I: confined to corpus IA: length uterine cavity <8 cm IB: length uterine cavity >8 cm	IA: limited to endometrium IB: <½ myometrium IC: >½ myometrium	IA: limited to endometrium or <½ myometrium IB: ≥½ myometrium	IA1: non-aggressive histology limited to endometrial polyp OR limited to endometrium IA2: non-aggressive histology <½ myometrium with no or focal LVSI [†] IA3: low-grade endometrioid carcinoma limited to uterus and ovary ^{**} IB: non-aggressive histology ≥½ myometrium <u>and</u> no or focal LVSI IC: aggressive histology limited to polyp or endometrium
II: involving corpus and cervix	IIA: cervical glandular involvement IIB: cervical stromal invasion	II: cervical stromal invasion	IIA: cervical stroma invasion of non-aggressive histology IIB: substantial LVSI of non-aggressive histology IIC: aggressive histological types with any myometrial involvement
III: outside the uterus but not outside the true pelvis	IIIA: serosa, adnexa, or peritoneal cytology IIIB: vaginal involvement IIIC: pelvic or para-aortic lymph nodes	IIIA: serosa and/or adnexa IIIB: vaginal and/or parametrial involvement IIIC1: pelvic lymph nodes IIIC2: para-aortic lymph nodes	IIIA1: ovary or fallopian tube involvement (excluding IA3) IIIA2: uterine subserosa or serosa involvement IIIB1: vaginal and/or parametrial involvement IIIB2: pelvic peritoneum involvement IIIC1i: micrometastasis to pelvic lymph nodes IIIC1ii: macrometastasis to pelvic lymph nodes IIIC2i: micrometastasis to para-aortic lymph nodes IIIC2ii: macrometastasis to para-aortic lymph nodes
IV: outside the true pelvis, bladder, or bowel mucosa	IVA: bladder or bowel mucosa IVB: distant metastasis	IVA: bladder or bowel mucosa IVB: distant metastasis	IVA: bladder or bowel mucosa IVB: peritoneal metastasis beyond pelvis IVC: distant metastasis

Supplementary Table 6. Comparison of 1971, 1988, 2009, and 2023 International Federation of Gynecology and Obstetrics (FIGO) staging for endometrial cancer.

LVSI: lymphovascular space invasion.

2023 FIGO non-aggressive histology: endometrioid grade 1-2.

2023 FIGO aggressive histology: endometrioid grade 3, serous, clear cell, carcinosarcoma, mixed, undifferentiated, other (i.e., mesonephric-like, gastrointestinal mucinous type).

[†]No LVSI: 0 vessels; focal LVSI: <5 vessels; substantial LVSI: ≥5 vessels.

^{**}IA3 criteria: limited myometrial involvement, no LVSI, non-aggressive histology, absence of metastasis elsewhere, limited to both organs and unilateral without capsule invasion/rupture