DOI: 10.7860/NJLM/2025/81011.2935

Pathology Section

Impact of FIGO 2023 Staging Criteria for Endometrial Cancer on Stage Migration: A Single Centre Cross-sectional Study

PRIYANKA MAITY¹, DIPANWITA DAS², ANINDITA SINHA BABU³



ABSTRACT

Introduction: The 2023 FIGO (International Federation of Gynaecology and Obstetrics) staging for endometrial cancer (EC) has introduced marked changes from the 2009 criteria. Histology, Lymphovascular Space Invasion (LVSI), and molecular features have been incorporated into the new classification system, leading to stage migration of Endometrial Cancer (EC), greatest in early-stage disease.

Aim: To analyse the difference between the FIGO 2009 and FIGO 2023 classification systems for EC.

Materials and Methods: This cross-sectional, observational study included EC cases reported in the Department of Pathology, College of Medicine and JNM Hospital, Kalyani, West Bengal, India, over a ten year period from April 2015 to April 2025. The study population comprised 51 cases of EC. Each case of EC was staged according to both the FIGO 2009 staging scheme and the FIGO 2023 system. Stage migration was assessed according to the 2023 FIGO staging scheme. McNemar's test was used to test the significance of differences in Stage I and Stage II between the 2009 and 2023 classification systems. Confidence intervals (CI) and posthoc power were calculated. To determine agreement between the 2009 and 2023 schemes, Cohen's kappa was calculated. All statistical analyses were performed using International Business Machines Statistical Package for the Social Sciences (IBM SPSS) Statistics version 30.

Results: Stage distribution according to the 2009 FIGO scheme was 74.5% (n=38) for Stage I, 7.8% (n=4) for Stage II, 17.6% (n=9) for Stage III, and 0% for Stage IV, respectively; and according to the 2023 FIGO scheme it was 54.9% (n=28) Stage I, 29.4% (n=15) Stage II, 15.7% (n=8) Stage III, and 0% for Stage IV. Between the two schemes, in the 2023 staging system, Stage I distribution decreased from 74.5% (n=38) to 54.9% (n=28), whereas Stage II distribution increased from 7.8% (n=4) to 29.4% (n=15) and Stage III distribution decreased from 17.6% (n=9) to 15.7% (n=8). Based on the 2023 staging system, stage shifting occurred in 23.5% (n=12) of cases. Four cases were upstaged from IA to IIC and seven cases from IB to IIB. One case was downstaged from IIIA to IA. McNemar's test showed a significant difference in Stage I proportion between the 2009 and 2023 schemes (p=0.004) and a significant increase in Stage II assignments with the 2023 scheme (p=0.0009). The CIs for Stage I and Stage II differences were 6.30% to 32.92% and -34.31% to -8.83%, respectively. Cohen's kappa was 0.579. Post-hoc power calculation showed that the study had 84.45% power to detect the observed Stage I difference.

Conclusion: FIGO 2023 significantly reduces Stage I EC and significantly increases Stage II EC due to modifications in its criteria, incorporating substantial LVSI, myometrial invasion, and aggressive histologies. As the sample size is small for drawing broad conclusions, collaboration across multiple centres is required to enhance the study's statistical power and ensure more generalisable findings.

Keywords: Aggressive histology, International federation of gynaecology and obstetrics, Lymphovascular space invasion

INTRODUCTION

The cancer incidence burden continues to rise in India. The estimated top five sites of cancer among females are breast (28.8%), cervix (10.6%), ovary (6.2%), corpus uteri (3.7%), and lung (3.7%) [1]. Uterine cancer was previously considered a disease of the developed world. However, due to an increase in risk factors, there is a rising trend in the incidence of Endometrial Carcinoma (EC) in developing countries. Regarding endometrial cancer in India, the National Cancer Registry of India has projected a cumulative risk of 1 in 190 and an estimated five year prevalence of 6.56 per 100,000 women [2]. In this context, understanding the new International Federation of Gynaecology and Obstetrics (FIGO) update is pertinent.

The 2009 FIGO staging system for endometrial carcinoma (EC) was based on the extent of tumour invasion and metastasis. The 2023 FIGO staging for EC introduces marked changes from the 2009 criteria. This reflects substantial new information that better defines the pathology and molecular findings of EC. The understanding of the different histological types, tumour patterns, and molecular classifications of endometrial carcinoma has significantly improved

[3,4]. Histology, LVSI, and molecular features have been incorporated into the new classification system, leading to stage migration of EC, which is greatest in early-stage disease [3-6]. Validation studies of the new FIGO 2023 staging system have been published. These studies support the fact that the FIGO 2023 staging system has greater prognostic precision than the previous one [7,8]. The changes have notable implications for the choices of systemic and radiotherapy treatment and the accurate selection of patients for surgery. Studies have reported that new treatments, clinical trial results, and survival data correlate with pathologic and surgical findings [9-11].

In this study, the objective was to evaluate the differences between the 2023 and 2009 FIGO staging for EC and assess stage migration under the 2023 FIGO staging scheme. Statistical tests were performed to assess the significance of differences between the FIGO 2009 and FIGO 2023 classification systems of EC.

MATERIALS AND METHODS

This was a cross-sectional, observational study that included 51 cases of endometrial carcinoma (EC) reported over the last ten

years, from April 2015 to April 2025, in the Department of Pathology at the College of Medicine and JNM Hospital, Kalyani, West Bengal, India. As the study was observational and involved no interventions, approval from the Institutional Ethics Committee was not required. Details of the patients and their histopathology reports were retrieved from the departmental archives. Histopathology slides were reviewed by two experienced pathologists, with no disagreements observed between them. Identities of the patients were not disclosed at any stage of the study.

Inclusion and Exclusion criteria: Cases of radical hysterectomy with EC were included; small endometrial biopsies showing EC were excluded.

Study Procedure

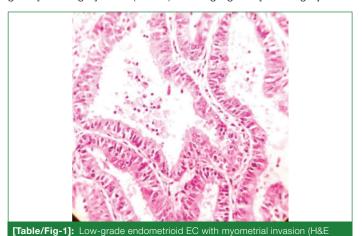
Molecular tests were not carried out. Each EC case was staged according to the FIGO 2009 staging scheme for EC and the FIGO 2023 staging system for EC [3,4]. The parameters assessed for staging EC were histological type, extent of tumour invasion, degree of myometrial invasion, degree of LVSI, and lymph node involvement. Histological types included endometrioid EC, serous EC, clear cell EC, etc. Substantial LVSI was defined as five or more involved vessels [3]. The non aggressive histological subtypes included low-grade endometrioid EC. The high-grade (aggressive) histological subtypes included high-grade endometrioid, serous, clear cell, mesonephric-like, gastrointestinal-type mucinous and undifferentiated EC, and carcinosarcoma. Stage shifting was assessed according to the 2023 FIGO staging scheme.

STATISTICAL ANALYSIS

All statistical analyses were performed using IBM SPSS Statistics Version 30 (IBM Corp., released September 2024, for Windows 11). First, power and the ideal patient population were assessed using McNemar's test of paired proportions in an assumed scenario of a 10% and a 5% stage shift between the 2009 and 2023 staging systems. McNemar's test was used to test the significance of differences in stages I and II between FIGO 2009 and FIGO 2023 classification systems. Confidence intervals and post hoc power were calculated. To determine agreement between the 2009 and 2023 schemes, Cohen's kappa statistic was used.

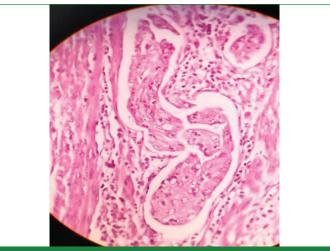
RESULTS

This study included 51 cases of endometrial cancer (EC). The mean age at presentation was 65.5 years (range 49-70 years). The study sample consisted mainly of patients from the southern districts of West Bengal: 45 (88.2%) from rural areas and 6 (11.8%) from urban areas. The majority belonged to the lower socioeconomic strata, while 6 (11.8%) were from the middle-income group. All patients underwent radical hysterectomy with lymph node dissection. The most common histologic type was endometrioid EC (n=49; 96%), followed by serous EC (n=2; 4%). Among the endometrioid ECs, 41 (83.6%) were low-grade[Table/Fig-1] and 8 (16.4%) were high-grade [Table/Fig-2].



[Table/Fig-2]: High-grade endometrioid EC showing cells with marked nuclear atypia, present in solid sheets (H&E stain, X400).

Three ECs (5.9%) were confined to the endometrium, without myometrial invasion or LVSI. These three cases were low-grade endometrioid EC; FIGO 2023 stage IA1 and FIGO 2009 stage IA. 11.8% (n=6) had less than 50% myometrial invasion. Of these, two cases were high-grade endometrioid EC with extensive LVSI [Table/Fig-3] but no lymph node involvement; FIGO 2023 stage IIC and FIGO 2009 stage IA. The other four cases were low-grade endometrioid EC without LVSI and without lymph node involvement; FIGO 2023 stage IA2 and FIGO 2009 stage IA.



[Table/Fig-3]: Two blood vessels showing tumour embolus (H&E stain, X400).

A total of 29 cases (56.8%) had more than 50% myometrial invasion. Of these, twenty cases had low-grade endometrioid EC with absent LVSI; FIGO 2023 stage IB and FIGO 2009 stage IB. Seven cases had low-grade endometrioid EC with extensive LVSI and no lymph node metastasis; FIGO 2023 stage IIB and FIGO 2009 stage IB. Two cases were low-grade endometrioid EC with extensive LVSI, involving the lower uterine segments and cervical stroma with metastasis in one pelvic lymph node; FIGO 2023 stage IIIC1(ii) and FIGO 2009 stage IIIC1.

Six cases (11.7%) of EC, all high-grade, had extensive LVSI and metastatic deposits in two pelvic lymph nodes; FIGO 2023 stage IIIC1(ii) and FIGO 2009 stage IIIC1. Four cases (7.8%) of EC, all low-grade endometrioid EC, showed invasion into the cervical stroma; FIGO 2023 stage IIA and FIGO 2009 stage II. In one patient (1.9%, n=1), there was synchronous presence of low-grade endometrioid EC in the endometrium with superficial myometrial invasion and no LVSI, and low-grade endometrioid carcinoma in the right ovary; FIGO 2023 stage IA3 and FIGO 2009 stage IIIA.

Stage distribution according to the 2009 FIGO scheme is: stage I, 74.5% (n=38); stage II, 7.8% (n=4); stage III, 17.6% (n=9); and

stage IV, 0%. According to the 2023 FIGO scheme, stage I is 54.9% (n=28); stage II, 29.4% (n=15); stage III, 15.7% (n=8); and stage IV, 0%. Between the two schemes, the 2023 staging system shows stage I distribution decreasing from 74.5% (n=38) to 54.9% (n=28), stage II distribution increasing from 7.8% (n=4) to 29.4% (n=15), and stage III distribution decreasing from 17.6% (n=9) to 15.7% (n=8) [Table/Fig-4].

No. of cases of Endometrial Cancer (EC)	FIGO 2023 stage	FIGO 2009 stage
3 (5.9%)	I (IA1)	I (IA)
4 (7.8%)	I (IA2)	I (IA)
20 (39.3%)	I (IB)	I (IB)
4 (7.8%)	II (IIC)	I (I A)
7 (13.8%)	II (IIB)	I (IB)
4 (7.8%)	II (IIA)	II
8 (15.7%)	III (IIIC1ii)*	III [IIIC1]
1 (1.9%)	I [IA3]	III [IIIA]

[Table/Fig-4]: Stage wise distribution of cases of EC - Format "stage" ("substage"). The stage denotated by FIGO 2023 to EC with macrometastasis to pelvic nodes is IIIC1 ii

Based on the 2023 staging system, stage shifting has occurred in 23.5% (n=12) of cases. Eleven cases were upstaged and one case was downstaged. Four cases were upstaged from IA to IIC and seven cases were upstaged from IB to IIB. One case was downstaged from IIIA to IA.

On application of McNemar's test, the difference in stage I proportion between the 2009 and 2023 schemes is statistically significant (p=0.004) [Table/Fig-5]. This indicates that the FIGO 2023 staging system assigns significantly fewer stage I cases than the FIGO 2009 system. Since the sample size is small, an exact binomial test was also performed and this shows a similar p-value (p=0.006), demonstrating the statistical significance of the difference in stage I proportion. On evaluation of the difference in stage II proportion between the 2009 and 2023 systems, the same statistical tests show a significantly higher proportion of stage II assignments in FIGO 2023 (p=0.0009 in McNemar's test and p=0.0005 in the exact binomial test), driven by upstaging from stage I.

FIGO 2023	Stage I	Not stage I	Total
FIGO 2009 stage I	27	11	38
FIGO 2009 not stage I	1	12	13
Total	28	23	51
Calculations			
p1= stage 1 in FIGO 2009	38/51=0.7451	p12= Stage 1 in 2009, not stage 1 in 2023	11/51=0.2157
p2= stage 1 in FIGO 2023	28/51=0.5490	p21=Stage 1 in 2023, not stage 1 in 2009	1/51=0.0196
δ^=p1-p2	0.1961	p12+p21	0.2353
		p12-p21	0.1961
McNemar's t	est statistic		
$\chi^2 = (b-c)^2/$ (b+c) for b=11, c=1	8.333, p=0.0039 from Chi square table	Exact binomial p-value	$p = 2 \cdot \sum_{k=11}^{12} {12 \choose k} (0.5)^{12} \approx 0.0063$
95% Confide	ence Interval (CI)		

 $SE = \sqrt{rac{p_{12} + p_{21}}{n}} = \sqrt{rac{0.2353}{51}} pprox \sqrt{0.004614} pprox 0.0679$

 $1.96 \cdot 0.0679 \approx 0.1331$

 $95\% \text{ CI} = 0.1961 \pm 0.1331 = (0.0630, 0.3292) \approx (6.30\%, 32.92\%)$

Post-hoc Power Calculation for Stage I

$$Z_{1-eta} = rac{\sqrt{n} \cdot (p_{12} - p_{21}) - Z_{1-lpha/2} \sqrt{p_{12} + p_{21}}}{\sqrt{p_{12} + p_{21} - (p_{12} - p_{21})^2}}$$

where, p12=0.2157, p21=0.0196, n=51 is 1.0133. Power as per Z table= 84.45%

[Table/Fig-5]: Showing stagel mismatch between FIGO 2009 and FIGO 2023 ystems with McNemar's test, exact binomial test and post-hoc power calculation.

Stage I data show a 95% CI of 6.30% to 32.92%. Stage II data show a 95% CI of -34.31% to -8.83%. The wide CIs (widths of 26.62% for stage I and 25.48% for stage II) indicate low precision, but both exclude zero, supporting significant differences. Cohen's kappa=0.579, indicating moderate agreement between the 2009 and 2023 staging systems. Post-hoc power calculation using McNemar's test of paired proportions shows that the study has 84.45% power to detect the observed stage I difference [Table/Fig-5-7].

FIGO 2009\FIGO 2023	Stage I	Stage II	Stage III	Total
Stage I	27	11	0	38
Stage II	0	4	0	4
Stage III	1	0	8	9
Total	28	15	8	51

Cohen's Kappa Test for agreements

Observed agreement= P0=(27+4+8)/51= 0.7647

P1= (Probability of stage I in 2009)x(Probability of stage I in 2023)=0.4089 Similarly P2=(Probability of stage II in 2009)x(Probability of stage II in 2023) and P3

Pe=P1+P2+P3=0.4412

$$\kappa = \frac{P_o - P_e}{1 - P_e} \text{= 0.579, moderate agreement as per Landis and Koch (0.41-0.60)}$$

[Table/Fig-6]: Showing stage mismatch between FIGO 2009 and FIGO 2023 systems: All stages and Cohen's Kappa Test for reliability.

FIGO 2023	Stage II	Not stage II	Total
FIGO 2009 stage II	4	0	4
FIGO 2009 not stage II	11	36	47
Total	15	36	51
Calculations			
p1= stage II in FIGO 2009	4/51=0.0784	p12= Stage 1 in 2009, not stage 1 in 2023	0
p2= stage II in FIGO 2023	15/51=0.2941	p21=Stage 1 in 2023, not stage 1 in 2009	11/51=0.2157
δ^=p1-p2	-0.2157	p12+p21	0.2157
		p12-p21	-0.2157
McNemar's test statistic			
$\chi^2 = (b-c)^2/$ (b+c) for b=0, c=11	11, p=0.0009 from Chi-square table	Exact Binomial p-value	p=(0.5)11=<0.0005 approx
95% Confidence	e Interval (CI)		

$$SE = \sqrt{\frac{0.2157}{51}} \approx \sqrt{0.004229} \approx 0.0650$$

 $1.96 \cdot ₹0.0650 ≈ 0.1274$

 $95\% \text{ CI} = -0.2157 \pm 0.1274 = (-0.3431, -0.0883) \approx (-34.31\%, -8.83\%)$

Post-hoc Power Calculation for Stage II

$$Z_{1-eta} = rac{\sqrt{n} \cdot (p_{12} - p_{21}) - Z_{1-lpha/2} \sqrt{p_{12} + p_{21}}}{\sqrt{p_{12} + p_{21} - (p_{12} - p_{21})^2}}$$

where, n=51, p12=0, p21=0.2157, is 1.5321 Power as per Z table=93.72%

[Table/Fig-7]: Showing stage II mismatch between FIGO 2009 and FIGO 2023 systems with McNemar's test, exact binomial test and post-hoc power calculation. The study population included a total of 51 cases. It was initially attempted to assess the power and precision of a comparison between the 2009 and the 2023 FIGO staging systems using assumptions of a 10% and a 5% stage shift. McNemar's test of paired proportions was applied and this yielded a power of 0.3193 for a 10% assumed shift (37.5% by the standard normal distribution table, with a 95% Cl of -1.51% to 17.51%, indicating poor reliability and precision) and a power of 0.6216 for a 5% assumed shift (26.7% by the standard normal distribution table, with a 95% CI of -2.25% to 12.25%, again indicating poor reliability and precision). It was also calculated that to achieve 80% power, a study population of 167 or more would be required to demonstrate a 10% stage shift, and 250 or more would be required for a 5% stage shift. Despite this analysis, due to the uniqueness of the patient pool, statistical analysis of the data was performed and many interesting conclusions were obtained.

DISCUSSION

The FIGO 2023 system identifies distinct treatment-relevant subgroups of EC. The 2023 FIGO staging for EC is no longer merely a staging system, but a combined prognostic and staging system. A prognostic system is more relevant and of greater utility for the patient and the physician. Initially, the only prognostic parameters available were the anatomic borders of disease spread; this has undergone considerable changes. Studies have demonstrated the important prognostic relevance of the extent of LVSI, grading and histological subtypes, and markers reflecting tumour biology, such as molecular subtypes [3,4]. The differences between the 2009 and 2023 FIGO staging systems for EC are presented in [Table/Fig-8] [3].

SN	FIGO 2009 staging system of EC	FIGO 2023 staging system of EC
1	The histological type of EC is not considered during staging.	The histological type of EC is considered during staging
2	LVSI is not considered during staging i.e. presence or absence of LVSI does not affect stage	LVSI is considered during staging. LVSI is graded as absent, focal or substantial.
3	Molecular study is not considered during staging.	Molecular study is considered during staging.
4	Stage I EC EC confined to uterine corpus which includes the following: Any histological type of EC with no myometrial invasion or less than half/half/ more than half of myometrial invasion Stage I EC EC confined to uterine corpus and ovary which includes any one of the following: Non aggressive histological type of EC with no myometrial invasion and no / focal LVSI Aggressive histological type of EC with no myometrial invasion Low-grade endometrioid EC limited to uterus and ovary POLE mutated EC, regardless of the degree of LVSI or histological type	
5	Stage II EC Any histological type of EC with invasion of cervical stroma without extrauterine extension	Stage II EC • Any histological type of EC with invasion of cervical stroma without extrauterine extension or • Any histological type of EC with substantial LVSI or • Aggressive histological type of EC with myometrial invasion or • p53 abnormal EC, regardless of the degree of LVSI or histological type

Low-grade endometrioid EC with focal or no LVSI and no serosal/subserosal involvement belongs to stage IA or IB. Low-grade endometrioid EC confined to the uterus with substantial LVSI is stage IIB. In the 2009 FIGO classification, LVSI was not part of staging. The present study had seven cases of low-grade endometrioid EC that were upstaged from stage IB (2009 FIGO) to stage IIB (2023 FIGO) due to the presence of substantial LVSI. It was noted in the PORTEC I and II trials that, in contrast to focal or no LVSI, substantial LVSI was

[Table/Fig-8]: Differences between FIGO 2009 and FIGO 2023 staging systems [3].

the strongest independent prognostic factor for distant metastasis, pelvic regional recurrence, and overall survival. A Swedish study of 1,500 cases of stage I-III endometrioid EC found that LVSI was the strongest independent risk factor for lymph node metastasis and also demonstrated that LVSI was independently associated with overall survival in pTN0 disease after systematic lymphadenectomy [12].

A low-grade endometrioid EC with more than 50% myometrial invasion and no/focal LVSI is stage I (stage IB), whereas a low-grade endometrioid EC with more than 50% myometrial invasion and extensive LVSI is stage II (stage IIB). The staging system does not incorporate LVSI in high-grade subtypes of EC [3]. Interobserver variability is common when evaluating LVSI. The recognition of myometrial invasion and identification of LVSI in tumour tissue depend on proper sampling.

Low-grade endometrioid EC limited to polyp/endometrium is stage IA1, and aggressive histological subtypes of EC limited to polyp/endometrium are stage IC. In 2009 FIGO staging, any EC limited to polyp/endometrium was IA. Aggressive histological subtypes of EC with any percentage of myoinvasion are stage IIC. Low-grade endometrioid EC with myoinvasion of <50% (and no/focal LVSI) is stage IA2. Low-grade endometrioid EC with myoinvasion of \geq 50% (and no/focal LVSI) is stage IB. In 2009 FIGO staging, histological subtype was not taken into account. Any EC with myoinvasion <50% was stage IA and with myoinvasion \geq 50% was stage IB [3,4]. In the present cohort, there were two cases of high-grade endometrioid EC and two cases of serous EC with myometrial invasion that were upstaged from stage I (2009 FIGO) to stage IIC (2023 FIGO).

The 2023 FIGO staging system includes histological subtypes, reflecting differences in prognosis between high-grade (aggressive) histological subtypes and low-grade endometrioid (non aggressive) histological subtypes. The high-grade (aggressive) histological subtypes of EC include high-grade endometrioid, serous, clear cell, mesonephric-like, gastrointestinal-type mucinous and undifferentiated EC, and carcinosarcoma [4].

The present study population had one patient with synchronous presence of low-grade endometrioid carcinoma in the endometrium and low-grade endometrioid carcinoma in the right ovary. These cases are classified as stage IA3 and have a good prognosis. Adjuvant treatment is not recommended [13,14]. This stage must be differentiated from stage IIIA1, where there is extensive spread of endometrial carcinoma to the ovary. A tumour belongs to stage IA3 when myometral invasion is less than 50%; extensive LVSI is absent; additional metastasis is absent; and the ovarian tumour is unilateral and confined to the ovary, without capsular invasion or capsular rupture.

Histological subtyping and grading have limitations. Therefore, FIGO encourages molecular classification in all EC, particularly high-grade histological subtypes for appropriate allocation into the correct prognostic group. The 2023 FIGO staging system includes two molecularly defined substages in early-stage disease, in two clearly defined scenarios: 1) EC of any histological subtype confined to the uterus (corpus ± cervical invasion) with a pathogenic POLE mutation is stage IA mPOLEmut; and 2) EC of any histological subtype confined to the uterus (corpus ± cervical invasion) with myometrial invasion and a p53 abnormality is stage IIC p53abn. POLE-mutated early-stage disease shows a favourable prognosis even without adjuvant treatment. p53 abnormal cases with myometrial invasion have a poor prognosis [3,4,13,14].

Molecular analysis becomes quite challenging in developing countries with limited resources. It is not feasible to evaluate POLE mutation and p53 abnormality in all cases of EC due to financial constraints. A high-grade endometrioid EC with some myometrial invasion is FIGO stage IIIC. The same cancer with POLE mutation is FIGO stage IA mPOLEmut. A low-grade endometrioid EC with less than 50% myometrial invasion is FIGO stage IA; the same cancer with a p53 abnormality becomes FIGO IICp53abn. In the absence of

molecular segregation and classification of EC, the risk of recurrence and hence the survival cannot be estimated accurately [15].

The present study shows that, between the two staging schemes, the 2023 staging system decreases stage I distribution from 74.5% to 54.9%, increases stage II distribution from 7.8% to 29.4%, and slightly decreases stage III distribution from 17.6% to 15.7%. Matsuo K. et al., reported a decrease in stage I distribution from 72.9% to 53.6% and an increase in stage II distribution from 5.2% to 28.7% [8].

Based on the 2023 staging system, stage shifting has occurred in 23.5% of cases. 7.8% of cases were upstaged from IA to IIC, and 13.7% were upstaged from IB to IIB. 1.9% of cases were downstaged from IIIA to IA. Upstaging (IA \rightarrow II, 21.4%; IB \rightarrow II, 53.0%) and downstaging (IIIA \rightarrow IA3, 22.2%) were reported by Matsuo K. et al., [8].

In the present study, upstaging of 21.5% of cases from FIGO 2023 stage I to II reflects the incorporation of histopathological criteria, including substantial LVSI, myometrial invasion, and aggressive histological type, into the staging system. The study had 84.45% power to detect the observed large stage I difference. The wide 95% CIs indicate low precision due to the small sample size of 51 cases. Moderate agreement between the FIGO 2009 and 2023 systems suggests that the latter introduces meaningful changes, particularly for early-stage disease. For stage III, there is high concordance between the 2009 and 2023 systems, with one case downstaged from III to I, suggesting stability for advanced stages.

Limitation(s)

This study had certain limitations. The sample size (n=51) was small, limiting generalisability and precision, with wide Cls reducing confidence in the exact magnitude of stage shifts. No molecular tests were performed (POLE mutation and p53 abnormality), and this may underestimate the full impact of FIGO 2023, as molecular profiling drives additional shifts.

CONCLUSION(S)

The 2023 FIGO EC staging system aims to better define prognostic groups and create substages based on evidence. FIGO 2023 significantly reduces stage I EC and significantly increases stage II EC due to modifications in its criteria, incorporating substantial LVSI, myometrial invasion, and aggressive histologies. Given the small sample size, collaboration across multiple centres is required to enhance statistical power and ensure more generalisable findings.

REFERENCES

- Sathishkumar K, Chaturvedi M, Das P, Stephen S, Mathur P. Cancer incidence estimates for 2022 & projection for 2025: Result from National Cancer Registry Programme, India. Indian J Med Res. 2022;156(4&5):598-607.
- [2] Mathur P, Sathishkumar K, Chaturvedi M, Das P, Sudarshan KL, Santhappan S, et al. Cancer Statistics, 2020: Report From National Cancer Registry Programme, India. JCO Glob Oncol. 2020;6:1063-75.
- [3] Berek JS, Matias-Guiu X, Creutzberg C, Fotopoulou C, Gaffney D, Kehoe S, et al. Endometrial Cancer Staging Subcommittee, FIGO Women's Cancer Committee. FIGO staging of endometrial cancer: 2023. Int J Gynaecol Obstet. 2023;162:383-94.
- [4] Gaffney D, Matias-Guiu X, Mutch D, Scambia G, Creutzberg C, Fotopoulou C, et al. 2023 FIGO staging system for endometrial cancer: The evolution of the revolution. Gynecol Oncol. 2024;184:245-53.
- [5] Haight PJ, Riedinger CJ, Backes FJ, O'Malley DM, Cosgrove CM. The right time for change: A report on the heterogeneity of IVB endometrial cancer and improved risk-stratification provided by new 2023 FIGO staging criteria. Gynecol Oncol. 2023;175:32-40.
- [6] Kobayashi-Kato M, Fujii E, Asami Y, Ahiko Y, Hiranuma K, Terao Y, et al. Utility of the revised FIGO2023 staging with molecular classification in endometrial cancer. Gynecol Oncol. 2023;178:36-43.
- [7] Matsuo K, Klar M, Song BB, Roman LD, Wright JD. Validation of the 2023 FIGO staging schema for advanced endometrial cancer. Eur J Cancer. 2023;193:113316.
- [8] Matsuo K, Chen L, Klar M, Lee MW, Machida H, Mikami M, et al. Prognostic performance of the 2023 FIGO staging schema for endometrial cancer. Gynecol Oncol. 2024;187;37-45.
- [9] Schilling JM, Shaker N, Shaker N, Fadare O. The 2023 FIGO staging system for endometrial carcinoma: Predicted impact on stage distribution based on a retrospective analysis of 1169 cases. Am J Surg Pathol. 2024;48:123-26.
- [10] Schwameis R, Fanfani F, Ebner C, Zimmermann N, Peters I, Nero C, et al. Verification of the prognostic precision of the new 2023 FIGO staging system in endometrial cancer patients- An international pooled analysis of three ESGO accredited centres. Eur J Cancer. 2023;193:113317.
- [11] Vergote I, Matias-Guiu X. New FIGO 2023 endometrial cancer staging validation. Welcome to the first molecular classifiers and new pathological variables! Eur J Cancer. 2023;193:113318.
- [12] Stalberg K, Bjurberg M, Borgfeldt C, Carlson J, Dahm-Kahler P, Floter-Radestad A, et al. Lymphovascular space invasion as a predictive factor for lymph node metastases and survival in endometrioid endometrial cancer- A Swedish gynecologic cancer group (SweGCG) study. Acta Oncol. 2019;58:1628-33.
- [13] Zheng W. Molecular Classification of Endometrial Cancer and the 2023 FIGO Staging: Exploring the Challenges and Opportunities for Pathologists. Cancers (Basel). 2023;15:4101.
- [14] Chandramohan A, Manchanda S, Renganathan R, Popat PB, Shah D, Dhamija E, Sen A. Impact of the 2023 FIGO Staging System for Endometrial Cancer on the Use of Imaging Services: An Indian Perspective. Indian J Radiol Imaging. 2023;34:309-23.
- [15] Libert D, Hammer PM, Hui C, Kidd EA, Folkins AK, Longacre T, et al. Prognostic performance of FIGO 2023 endometrial carcinoma staging: A comparison to FIGO 2009 staging in the setting of known and unknown molecular classification. Histopathology. 2024;85:804-19.

PARTICULARS OF CONTRIBUTORS:

- 1. Assistant Professor, Department of Pathology, College of Medicine and JNM Hospital, Kalyani, West Bengal, India.
- 2. Associate Professor, Department of Pathology, College of Medicine and JNM Hospital, Kalyani, West Bengal, India.
- 3. Professor, Department of Pathology, College of Medicine and JNM Hospital, Kalyani, West Bengal, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Priyanka Maity,

Department of Pathology, 2^{nd} Floor, College Building, College of Medicine and JNM Hospital, Kalyani-741235, West Bengal, India. E-mail: prnkmaity579@gmail.com

PLAGIARISM CHECKING METHODS: [Jain H et al.]

- Plagiarism X-checker: Jun 04, 2025
- Manual Googling: Aug 05, 2025
- iThenticate Software: Aug 28, 2025 (11%)

ETYMOLOGY: Author Origin

EMENDATIONS: 7

AUTHOR DECLARATION:

- Financial or Other Competing Interests: None
- Was Ethics Committee Approval obtained for this study?
- Was informed consent obtained from the subjects involved in the study?
- For any images presented appropriate consent has been obtained from the subjects.

Date of Submission: May 30, 2025 Date of Peer Review: Jun 12, 2025 Date of Acceptance: Aug 29, 2025 Date of Publishing: Oct 01, 2025