Original Article

DOI: 10.4274/anajog.galenos.2026.69775

Anat J Obstet Gynecol Res 2026;3(2):124-130

Prediction of Surgical Resectability after Neoadjuvant Chemotherapy in Advanced Ovarian Cancer: Comparison of MRI-Based and Laparoscopy-Based Scoring Systems

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ABSTRACT

Purpose: To compare the predictive performance of magnetic resonance imaging (MRI)-based and laparoscopy (LS)-based scoring systems for determining surgical resectability after neoadjuvant chemotherapy (NACT) in advanced ovarian cancer initially considered unsuitable for primary cytoreductive surgery.

Methods: This retrospective observational study included consecutive patients with advanced epithelial ovarian, fallopian tube, or primary peritoneal carcinoma treated at a tertiary gynecological oncology center between December 2023 and April 2026. All patients were initially deemed unresectable, received platinum-based NACT, and subsequently underwent post-NACT MRI followed by diagnostic LS for reassessment of surgical feasibility. MRI-peritoneal cancer index (PCI), MRI-Fagotti, LS-PCI, and LS-Fagotti were evaluated. The primary endpoint was successful cytoreduction, defined as complete or optimal interval cytoreductive surgery. Receiver operating characteristic curve analysis was used to assess predictive performance.

Results: A total of 42 patients were included. Complete or optimal cytoreduction was achieved in 25 patients (59.5%), while 17 patients (40.5%) underwent suboptimal cytoreduction or were considered unresectable. MRI-based scores showed limited predictive performance, with area under the curve (AUC) values of 0.595 [95% confidence interval (CI), 0.401-0.782 <9 for MRI-PCI and 0.542 (95% CI, 0.362-0.721) for MRI-Fagotti. In contrast, LS-based scores demonstrated substantially higher predictive accuracy. LS-PCI yielded an AUC of 0.913 (95% CI, 0.810-0.989), whereas LS-Fagotti achieved an AUC of 0.991 (95% CI, 0.966-1.000). An LS-Fagotti cutoff value of ≤8 predicted successful cytoreduction with 96.0% sensitivity and 100.0% specificity.

Conclusion: In patients undergoing reassessment after NACT for advanced ovarian cancer, LS-based scoring systems demonstrated superior predictive performance compared with MRI-based scoring systems. Diagnostic LS remains a valuable tool for selecting candidates for interval cytoreductive surgery and may improve surgical decision-making in the post-NACT setting.

Keywords: Ovarian neoplasms, neoadjuvant therapy, laparoscopy, cytoreduction surgical procedures, magnetic resonance imaging

INTRODUCTION

Epithelial ovarian cancer remains the most lethal gynecological malignancy worldwide and is frequently diagnosed at an advanced stage, characterized by extensive peritoneal dissemination.[1] Despite advances in systemic therapy and surgical techniques, complete cytoreduction remains the most important prognostic factor associated with progression-free and overall survival.[2] Consequently, accurate preoperative assessment of disease extent and surgical resectability is essential for selecting the most appropriate treatment strategy and avoiding unnecessary laparotomies.[3]

For patients presenting with extensive tumor burden or poor performance status, neoadjuvant chemotherapy (NACT) followed by interval debulking surgery has become an accepted alternative to primary cytoreductive surgery.[4]

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Received: 03.06.2026 **Accepted:** 17.07.2026 **Publication Date:** 02.09.2026

Cite this article as: Özen S, Güner Özen E, Özuyar Şimşek G, Başkır İşlek, Sancı M. Prediction of surgical resectability after neoadjuvant chemotherapy in advanced ovarian cancer: comparison of mri-based and laparoscopy-based scoring systems. Anat J Obstet Gynecol Res. 2026;3(2):124-130

Several randomized trials have demonstrated comparable survival outcomes between these approaches when optimal cytoreduction can be achieved.[5,6] However, patient selection remains challenging, particularly during post-NACT reassessment, where the decision to proceed with interval surgery depends on the likelihood of achieving complete or optimal cytoreduction.[7]

Various imaging modalities have been investigated to predict surgical resectability in advanced ovarian cancer. Computed tomography, magnetic resonance imaging (MRI), diffusion-weighted MRI, and positron emission tomography/computed tomography have all been used to estimate tumor burden and peritoneal dissemination.[8] More recently, imaging-based adaptations of the peritoneal cancer index (PCI) and Fagotti scoring system have been proposed as objective tools for preoperative surgical triage.[9,10] Although several studies have reported promising diagnostic performance for MRI-derived PCI and radiological Fagotti scores, the accuracy of these approaches after NACT remains uncertain.[11,12] Treatment-related fibrosis, inflammatory changes, and residual microscopic disease may limit the ability of conventional imaging to accurately reflect the true intra-abdominal disease burden.[13,14]

Diagnostic laparoscopy (LS) has emerged as a valuable method for direct assessment of peritoneal disease and remains widely used for evaluating surgical feasibility in advanced ovarian cancer.[11,15] Laparoscopic PCI and the Fagotti predictive index value have demonstrated strong associations with cytoreductive outcomes in both primary and interval surgical settings.[16,17] Nevertheless, data directly comparing MRI-based and LS-based scoring systems in patients undergoing post-NACT reassessment remain limited.[10,18]

The present study was designed to evaluate the ability of MRI-based and LS-based scoring systems to predict successful interval cytoreduction after NACT in patients with advanced ovarian cancer initially deemed unresectable. Specifically, we compared the predictive performance of MRI-PCI, MRI-Fagotti, LS-PCI, and LS-Fagotti scores for identifying patients likely to achieve complete or optimal cytoreduction.

METHODS

Study Design and Patient Selection

This retrospective observational study was conducted at the Department of Gynecologic Oncology, University of Health Sciences Turkey, İzmir City Hospital, Turkey. Consecutive patients with advanced epithelial ovarian, fallopian tube, or primary peritoneal carcinoma who were initially considered unsuitable for primary cytoreductive surgery and subsequently received NACT between December 2023 and April 2026 were screened for eligibility.

Patients were included if they met all of the following criteria: (1) age ≥18 years; (2) histopathologically confirmed epithelial ovarian, fallopian tube, or primary peritoneal carcinoma; (3) Federation of Gynecology and Obstetrics (FIGO) stage IIIC-IVB disease at diagnosis; (4) documentation at multidisciplinary tumor board review of unresectable disease or anticipated inability to achieve complete or optimal primary cytoreduction; (5) administration of platinum-based NACT; (6) availability of post-NACT abdominal and pelvic MRI; (7) diagnostic LS performed after completion of NACT for reassessment of surgical resectability; and (8) complete clinical, operative, and pathological records.

Patients with borderline ovarian tumors, non-epithelial ovarian malignancies, recurrent disease, absence of post-NACT MRI, incomplete imaging studies, missing LS assessment, incomplete operative documentation, or concurrent malignancies affecting treatment strategy were excluded.

The study was conducted in accordance with the ethical principles of the Declaration of Helsinki and was approved by the University of Health Sciences Turkey İzmir City Hospital Non-Interventional Ethics Committee (approval no: 2026/224, date: 08.04.2026). Due to the retrospective nature of the study, the requirement for informed consent was waived by the Ethics Committee.

Magnetic Resonance Imaging Assessment

Following completion of NACT, all patients underwent abdominal and pelvic MRI using a 1.5-T scanner equipped with dedicated phased-array pelvic coils. The imaging protocol included axial and sagittal T1-weighted sequences, multiplanar T2-weighted sequences, diffusion-weighted imaging (DWI) with apparent diffusion coefficient maps, and dynamic contrast-enhanced T1-weighted imaging following intravenous gadolinium administration.

MRI examinations were interpreted in routine institutional practice by radiologists experienced in gynecological oncology imaging. For the present retrospective study, MRI-based PCI and MRI-based Fagotti scores were reconstructed from the finalized MRI examinations and radiology reports. MRI-PCI was calculated according to the Sugarbaker methodology.[19] MRI-Fagotti was adapted from the original predictive index value system and translated into seven MRI-defined domains: peritoneal carcinomatosis (diffuse nodular or miliary peritoneal disease), omental cake (confluent omental tumor or extension toward the greater curvature), diaphragmatic involvement (focal or diffuse diaphragmatic implants), mesenteric disease (mesenteric nodularity, mesenteric root involvement, or retraction), bowel infiltration (serosal nodules or bowel wall involvement), stomach infiltration (gastric wall or serosal involvement), and liver surface metastases (any capsular implant). MRI-Fagotti scoring followed the same 0/2 weighting scheme as the original laparoscopic predictive index value, resulting in a total score ranging from 0 to 14. This radiologic adaptation was based on previously published MRI-based applications of the Fagotti system.[18]

Radiological assessment additionally included ascites, peritoneal implants, omental disease, diaphragmatic involvement, mesenteric infiltration, bowel serosal involvement, liver surface lesions, splenic hilar disease, and lymph node enlargement. Lymph nodes were considered suspicious when the short-axis diameter was ≥10 mm, when irregular margins were present, or when restricted diffusion was observed on DWI sequences. Unfortunately, formal interobserver

agreement analysis could not be performed because separate independent reader-level datasets were not available in this retrospective cohort.

Baseline serum cancer antigen 125 (CA-125) was defined as the value obtained before initiation of NACT. When only a single CA-125 measurement was available, this value was accepted as the baseline level.

Diagnostic Laparoscopy and Surgical Management

All patients underwent diagnostic LS after completion of MRI assessment. LS evaluation was performed by gynecological oncologists to determine the feasibility of interval cytoreductive surgery. Under institutional practice, the decision to proceed to exploratory laparotomy was based on the overall LS reassessment rather than on MRI scores alone.

Disease extent was quantified using LS-PCI and LS-Fagotti. LS-PCI was calculated according to the standard 13-region Sugarbaker classification.[19] LS-Fagotti was determined using the original Predictive Index Value scoring system.[18]

Patients considered suitable candidates for interval cytoreductive surgery proceeded to exploratory laparotomy and cytoreductive surgery. Surgical procedures were individualized according to disease distribution and included total abdominal hysterectomy, bilateral salpingo-oophorectomy, omentectomy, peritonectomy procedures, bowel resection, diaphragmatic stripping, splenectomy, and other upper abdominal procedures, when indicated.

Patients in whom complete or optimal cytoreduction was considered unlikely after LS assessment were classified as having unresectable disease and were managed according to institutional multidisciplinary treatment protocols.

Statistical Analysis

Statistical analyses were performed using IBM SPSS Statistics for Windows, version 30.0 (IBM Corp., Armonk, NY, USA). All statistical tests were two-sided, and a p value <0.05 was considered statistically significant.

Continuous variables were assessed for normality using the Shapiro-Wilk test. Normally distributed variables are presented as mean ± standard deviation and were compared using the independent-samples t-test. Non-normally distributed variables are reported as median and interquartile range (IQR) and were compared using the Mann-Whitney U test.

Categorical variables are expressed as frequencies and percentages and were compared using the chi-square test or Fisher's exact test, as appropriate.

Receiver operating characteristic (ROC) curve analysis was performed to evaluate the predictive performance of MRI-PCI, MRI-Fagotti, LS-PCI, and LS-Fagotti for successful cytoreduction. Area under the curve (AUC) with 95% confidence intervals (CIs) were calculated. Optimal cutoff values were determined using the Youden index. Sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV), and overall accuracy were calculated for each model. Comparisons between ROC curves were performed using bootstrap resampling methods. As secondary analyses, complete cytoreduction (R0) was evaluated separately, and multivariable binomial logistic regression was performed to examine whether score-based variables remained associated with favorable cytoreduction after adjustment for age, FIGO stage (IIIC vs stage IV), and log-transformed CA-125. As quasi-complete separation was observed with LS-Fagotti, the parsimonious multivariable model included LS-PCI.

RESULTS

Patient Characteristics

A total of 42 patients met the eligibility criteria and were included in the final analysis. All patients were initially considered unsuitable for primary cytoreductive surgery, received NACT, and subsequently underwent post-treatment MRI followed by diagnostic LS for reassessment of surgical resectability; the median interval between MRI and LS was 9 days (IQR, 6-13 days; range, 2-18 days).

High-grade serous carcinoma represented the predominant histological subtype (35/42, 83.3%), followed by endometrioid carcinoma (4/42, 9.5%) and clear cell carcinoma (3/42, 7.1%). FIGO stage distribution consisted of stage IIIC in 23 patients (54.8%), stage IVA in 7 (16.7%), and stage IVB in 12 (28.6%). Thirty-nine patients (92.9%) were postmenopausal. Baseline clinicopathological and perioperative characteristics are summarized in Table 1.

Complete or optimal cytoreduction was achieved in 25 patients (59.5%), whereas 17 patients (40.5%) underwent suboptimal cytoreduction or were considered unsuitable for cytoreductive surgery. Residual disease assessment demonstrated R0 resection in 15 patients (35.7%), optimal residual disease in 10 (23.8%), suboptimal residual disease in 10 (23.8%), and unresectable disease in 7 patients (16.7%).

Comparison According to Surgical Outcome

Patients in the unfavorable outcome group were significantly older than those in the favorable outcome group [69 years (IQR, 66-75) vs. 55 years (IQR, 52-64), $p=0.004$]. Baseline CA-125 levels were higher in the unfavorable group, although the difference did not reach statistical significance [4575 U/mL (IQR, 3161-5456) vs. 3106 U/mL (IQR, 2062-5441), $p=0.106$].

MRI-derived scores did not differ significantly between outcome groups. Median MRI-PCI was 12 (IQR, 7-14; range, 2-16) in the favorable group and 10 (IQR, 7-18) in the unfavorable group ($p= 0.302$). Median MRI-Fagotti scores were 6 (IQR, 2-6; range, 0-8) and 4 (IQR, 4-8; range, 0-8), respectively ($p=0.646$).

LS-based scores differed significantly according to surgical outcome. Median LS-PCI was 18 (IQR, 15-20) in the favorable group and 24 (IQR, 22-31) in the unfavorable group ($p<0.001$). Median LS-Fagotti scores were 8 (IQR, 8-8) and 12 (IQR, 10-12), respectively ($p<0.001$).

Mean operative time was 335.3±63.5 minutes in the favorable group and 397.1±36.5 minutes in the unfavorable group ($p=0.001$). Estimated blood loss was 1058.0±345.4 mL and 1487.6±262.6 mL, respectively ($p<0.001$).

Predictive Performance of MRI-Based and LS-Based Scores

ROC analysis results are presented in Table 2 and Figure 1. MRI-based scoring systems demonstrated limited predictive performance for successful cytoreduction. MRI-PCI yielded an AUC of 0.595 (95% CI, 0.401-0.782); the optimal cutoff value was ≤16, corresponding to a sensitivity of 100.0% and a specificity of 35.3%. MRI-Fagotti yielded an AUC of 0.542 (95% CI, 0.362-0.721), with an optimal cut-off value of ≤2, providing a sensitivity of 36.0% and a specificity of 82.4%. In contrast, LS-based scoring systems demonstrated superior discriminatory ability. LS-PCI yielded an AUC of 0.913 (95% CI, 0.810-0.989); a cut-off value of ≤20 resulted in a sensitivity of 88.0% and a specificity of 88.2%. LS-Fagotti achieved the highest predictive performance, with an AUC of 0.991 (95% CI, 0.966-1.000); a cut-off value of ≤8 was associated with a sensitivity of 96.0%, specificity of 100.0%, PPV of 100.0%, and NPV of 94.4%. Bootstrap comparison demonstrated that LS-Fagotti significantly outperformed MRI-Fagotti (ΔAUC 0.448, $p<0.001$) and that LS-PCI significantly outperformed MRI-PCI (ΔAUC 0.318, $p=0.015$). LS-Fagotti also showed marginally higher discrimination than LS-PCI (ΔAUC 0.078, $p=0.049$).

On multivariable binomial logistic regression adjusted for age, FIGO stage (IIIC vs stage IV), and log-transformed CA-125, LS-PCI remained independently associated with favorable cytoreduction (adjusted odds ratio (OR) 0.55, 95% CI 0.33-0.94, $p=0.027$); age also remained significant (adjusted OR 0.82, 95% CI 0.69-0.98, $p=0.024$) (Table 3). A corresponding model including LS-Fagotti was not stable because of quasi-complete separation.

Table 1. Baseline characteristics according to cytoreductive outcome

Variable	Overall (n=42)	Complete/optimal (n=25)	Suboptimal/not feasible (n=17)	*p*
Age, years	61.1±11.2	56.4±10.5	67.9±8.4	0.004
CA-125, U/mL	3654.0 (2449.5-5452.2)	3106.0 (2062.0-5441.0)	4575.0 (3161.0-5456.0)	0.106
MRI PCI	11.0 (7.0-14.0)	12.0 (7.0-14.0)	10.0 (7.0-18.0)	0.302
MRI Fagotti	5.0 (2.0-8.0)	6.0 (2.0-6.0)	4.0 (4.0-8.0)	0.646
LS PCI	20.0 (16.0-24.0)	18.0 (15.0-20.0)	24.0 (22.0-31.0)	<0.001
LS Fagotti	8.0 (8.0-10.0)	8.0 (8.0-8.0)	12.0 (10.0-12.0)	<0.001
Operation time, min	360.3±61.8	335.3±63.5	397.1±36.5	0.001
Blood loss, mL	1231.9±377.3	1058.0±345.4	1487.6±262.6	<0.001
FIGO stage: IIIC	23 (54.8%)	14 (56.0%)	9 (52.9%)	0.583
IVA	7 (16.7%)	3 (12.0%)	4 (23.5%)	
IVB	12 (28.6%)	8 (32.0%)	4 (23.5%)	
Histology: high-grade serous carcinoma	35 (83.3%)	20 (80.0%)	15 (88.2%)	0.762
Endometrioid carcinoma	4 (9.5%)	3 (12.0%)	1 (5.9%)	
Clear cell carcinoma	3 (7.1%)	2 (8.0%)	1 (5.9%)	
Menopause: postmenopausal	39 (92.9%)	22 (88.0%)	17 (100.0%)	0.260
Premenopausal	3 (7.1%)	3 (12.0%)	0 (0.0%)	
Bowel resection: yes	21 (50.0%)	12 (48.0%)	9 (52.9%)	1.000
No	21 (50.0%)	13 (52.0%)	8 (47.1%)	
Any major complication: yes	7 (16.7%)	4 (16.0%)	3 (17.6%)	1.000
No	35 (83.3%)	21 (84.0%)	14 (82.4%)	

Data are presented as mean ± standard deviation, median (interquartile range), or n (%), as appropriate
CA-125: Cancer antigen 125, MRI: Magnetic resonance imaging, PCI: Peritoneal cancer index, LS: Laparoscopic

Table 2. Predictive performance of MRI- and laparoscopy-based scores

Score	AUC (95% CI)	Optimal cut-off	Sensitivity, %	Specificity, %	PPV, %	NPV, %	Accuracy, %
MRI-based PCI	0.595 (0.401-0.782)	≤16	100.0	35.3	69.4	100.0	73.8
MRI-based Fagotti	0.542 (0.362-0.721)	≤2	36.0	82.4	75.0	46.7	54.8
Laparoscopic PCI	0.913 (0.810-0.989)	≤20	88.0	88.2	91.7	83.3	88.1
Laparoscopic Fagotti	0.991 (0.966-1.000)	≤8	96.0	100.0	100.0	94.4	97.6

Pairwise bootstrap comparisons of AUCs: LS-Fagotti vs MRI-Fagotti, $p<0.001$; LS-PCI vs MRI-PCI, $p=0.015$; LS-Fagotti vs LS-PCI, $p=0.049$
AUC: Area under the curve, CI: Confidence interval, PPV: Positive predictive value, NPV: Negative predictive value, MRI: Magnetic resonance imaging, PCI: Peritoneal cancer index

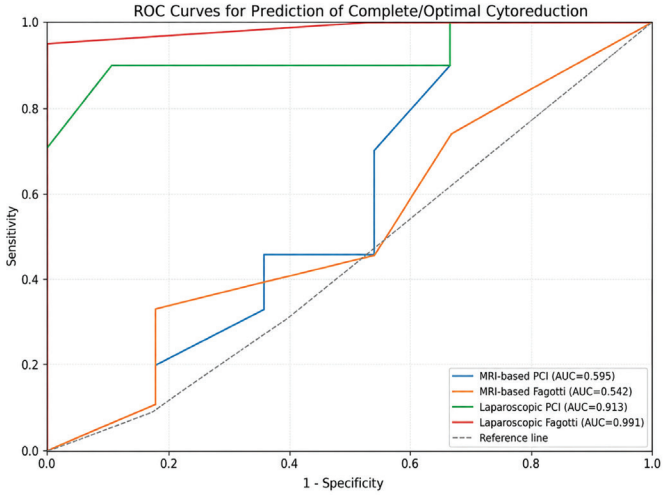

Figure 1. Receiver operating characteristic (ROC) curves of MRI-based and LS-based scoring systems for prediction of complete or optimal cytoreduction after neoadjuvant chemotherapy. LS-Fagotti demonstrated the highest predictive performance (AUC=0.991), followed by LS-PCI (AUC=0.913), whereas MRI-based scores showed limited discriminatory ability

MRI: Magnetic resonance imaging, LS: Laparoscopic, AUC: Area under the curve, PCI: Peritoneal cancer index

Table 3. Multivariable binomial logistic regression for favorable cytoreduction

Variable	Adjusted OR	95% CI	*p*
Age	0.82	0.69-0.98	0.024
FIGO stage IV vs. IIIC	2.11	0.10-44.54	0.630
log CA-125	4.19	0.18-95.99	0.370
LS-PCI	0.55	0.33-0.94	0.027

Model adjusted for age, FIGO stage (IIIC vs. stage IV), log-transformed CA-125, and LS-PCI. A separate LS-Fagotti model was not stable because of quasi-complete separation
OR: Odds ratio, CI: Confidence interval, FIGO: Federation of Gynecology and Obstetrics, PCI: Peritoneal cancer index, LS: Laparoscopic, CA-125: Cancer antigen 125

Secondary Analysis for Complete Cytoreduction (R0)

Complete cytoreduction (R0) was achieved in 15 of 42 patients (35.7%). In the secondary ROC analysis using R0 as the endpoint, MRI-based scores showed limited discriminatory ability. MRI-PCI yielded an AUC of 0.548, with an optimal cutoff value of ≤16, corresponding to 100.0% sensitivity, 22.2% specificity, 41.7% PPV, 100.0% NPV, and 50.0% accuracy. MRI-Fagotti yielded an AUC of 0.507, with an optimal cutoff value of ≤2, corresponding to 33.3% sensitivity, 74.1% specificity, 41.7% PPV, 66.7% NPV, and 59.5% accuracy. In contrast, laparoscopic scores retained higher discriminatory ability. LS-PCI yielded an AUC of 0.759, with an optimal cutoff value of ≤20, corresponding to 86.7% sensitivity, 59.3% specificity, 54.2% PPV, 88.9% NPV, and 69.0% accuracy. LS-Fagotti yielded an AUC of 0.807, with an optimal cut-off value of ≤8, corresponding to 93.3% sensitivity, 63.0% specificity, 58.3% PPV, 94.4% NPV, and 73.8% accuracy.

DISCUSSION

The present study compared the predictive performance of MRI-based and LS-based scoring systems for determining the feasibility of interval cytoreductive surgery after NACT in patients with advanced ovarian cancer who had initially been considered unsuitable for primary cytoreductive surgery. The main finding was that LS assessment showed substantially higher predictive accuracy than MRI-based scoring systems for identifying patients likely to achieve complete or optimal interval cytoreduction.

Diagnostic LS has become an established component of preoperative assessment in advanced ovarian cancer and remains one of the most reliable methods for evaluating resectability.[20] In our cohort, an LS-Fagotti cut-off value of 8 predicted successful cytoreduction with excellent diagnostic performance, consistent with the original predictive index value model described by Fagotti et al.[21] Similarly, the predictive value of LS-PCI observed in our study is in agreement with previous reports demonstrating that PCI values above 20 are associated with incomplete cytoreduction and poorer outcomes.[17,22,23]

In contrast, MRI-based scoring systems showed limited discriminatory ability. MRI-PCI and MRI-Fagotti demonstrated substantially lower predictive performance than their LS counterparts. These findings differ from recent studies reporting high diagnostic accuracy for MRI-derived PCI and radiological Fagotti scores.[12,18] Other investigations incorporating diffusion-weighted MRI and morphologic imaging features have similarly reported strong correlations between imaging-based disease assessment and surgical outcomes.[8,24] Furthermore, prospective multicenter studies have demonstrated that advanced imaging modalities can reliably predict non-resectability in selected patient populations.[10,25]

Several factors may explain the discrepancy between our findings and previous reports. Unlike most published studies, which evaluated treatment-naïve patients, our cohort consisted exclusively of patients reassessed after NACT. Post-treatment fibrosis, inflammatory changes, and chemotherapy-related tissue alterations may obscure the distinction between viable tumor and treatment response on conventional MRI. In addition, small-volume peritoneal implants and miliary carcinomatosis remain challenging to detect radiologically, despite advances in imaging technology.[3,13,26,27] Although emerging techniques such as whole-body diffusion-weighted MRI have shown promising results in the post-NACT setting, these approaches are not routinely available in daily clinical practice [14]. Importantly, the 95% CIs of MRI-PCI and MRI-Fagotti both included an AUC of 0.50, reinforcing the limited standalone discriminatory value of MRI-based prediction in this post-NACT assessment cohort.

Study Limitations

The present study has several limitations. Its retrospective design, single-center setting, and relatively limited sample size may restrict the generalizability of the findings. Diagnostic LS was not only evaluated as a predictive tool but also contributed to the decision to proceed to exploratory laparotomy. Therefore,

a degree of incorporation bias may have favored LS-based models. In addition, separate reader-level MRI datasets were not available, precluding formal interobserver agreement analysis. The near-perfect discrimination observed for LS-Fagotti should also be interpreted cautiously, as the small sample size and single-center design may have contributed to overestimation. Nevertheless, the study evaluated a homogeneous post-NACT population and provided a direct comparison between radiological and laparoscopic scoring systems within the same cohort, thereby offering clinically relevant data for surgical decision-making.

CONCLUSION

In patients with advanced ovarian cancer undergoing reassessment after NACT, laparoscopic scoring systems demonstrated superior predictive performance compared with MRI-based scoring systems for determining the feasibility of successful interval cytoreduction. LS-Fagotti and LS-PCI were strongly associated with surgical outcome, whereas MRI-derived scores showed limited predictive value in the post-NACT setting. These findings support the continued use of diagnostic LS as an important component of preoperative evaluation before interval debulking surgery.

Ethics

Ethics Committee Approval: Approved by the University of Health Sciences Turkey İzmir City Hospital Non-Interventional Ethics Committee (approval no: 2026/224, date: 08.04.2026).

Informed Consent: The requirement for informed consent was waived due to the retrospective design of the study.

Footnotes

Authorship Contributions

Surgical and Medical Practices: S.Ö., G.Ö.Ş., İ.B.İ., M.S., Concept: S.Ö., E.G.Ö., Design: S.Ö., E.G.Ö., Data Collection or Processing: S.Ö., E.G.Ö., İ.B.İ., M.S., Analysis or Interpretation: S.Ö., G.Ö.Ş., Literature Search: S.Ö., E.G.Ö., G.Ö.Ş., Writing: S.Ö., E.G.Ö., M.S.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study received no financial support.

Declaration on the Use of Artificial Intelligence (AI): No artificial intelligence tools were used in the preparation of this manuscript.

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