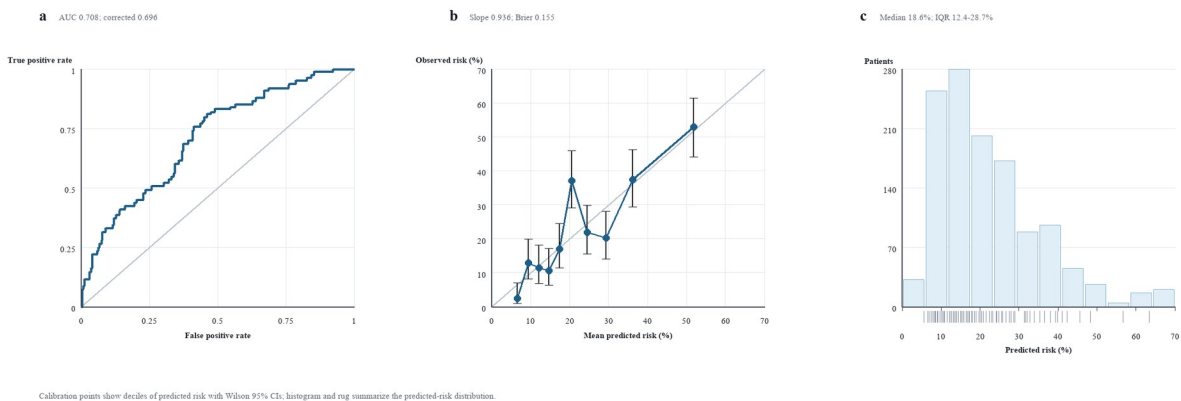


Additional file 1

Supplementary information for: Regimen-Specific Bowel Preparation and Early Postoperative C-Reactive Protein Elevation After Laparoscopic Hysterectomy: A Propensity Score-Matched Cohort Study

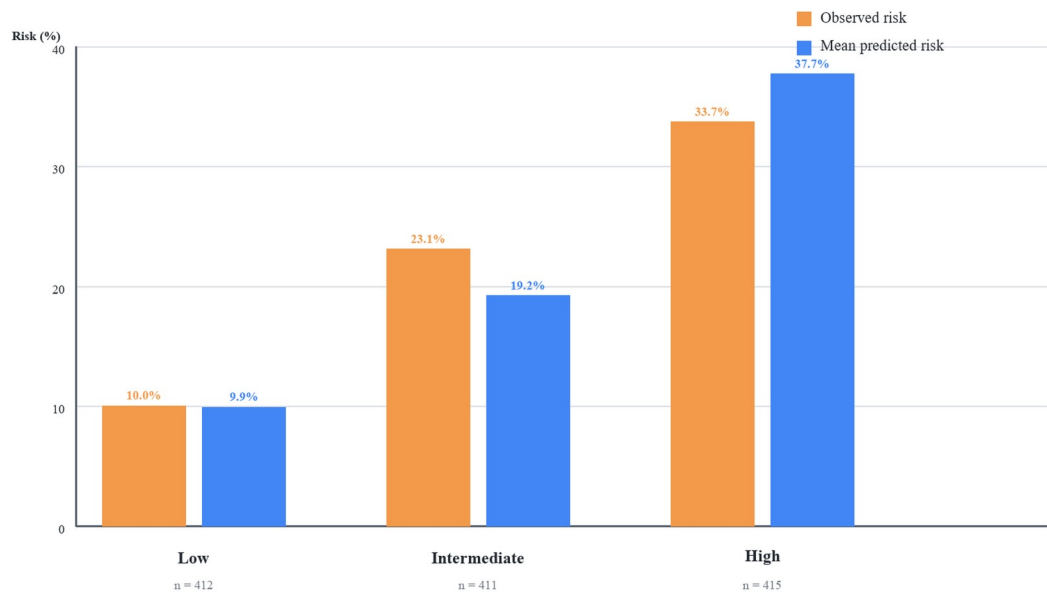
Yihan Zheng, Xizhu Wu, Longxin Zhang, Jing Wang

Supplementary Figure 1. Exploratory prediction model performance



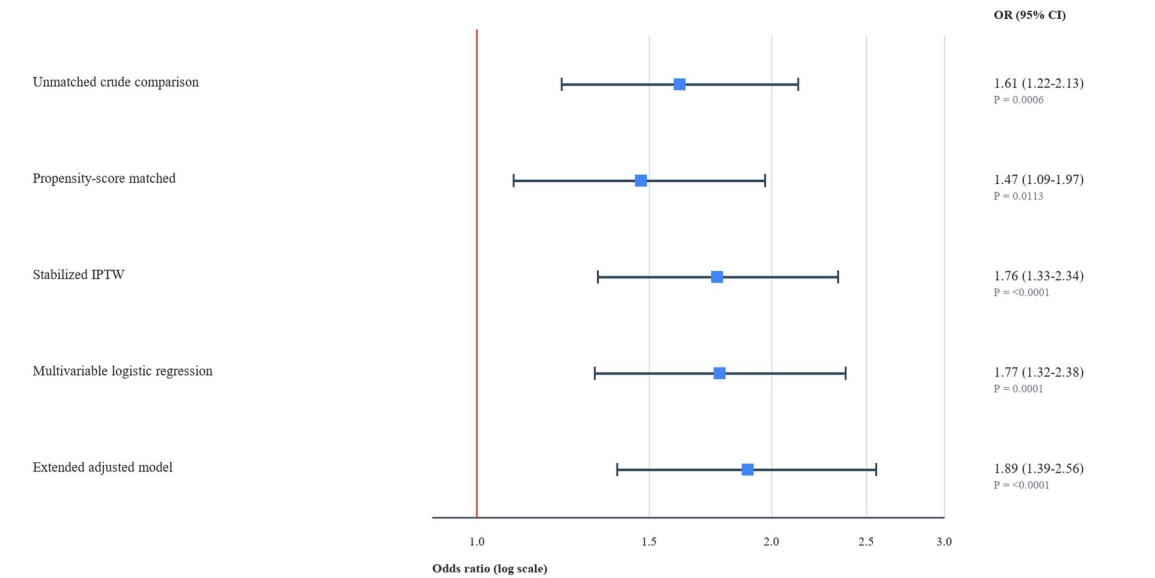
Receiver operating characteristic curve, decile-based calibration plot with Wilson 95% confidence intervals, and predicted-risk distribution for the exploratory perioperative prediction model.

Supplementary Figure 2. Predicted-risk groups



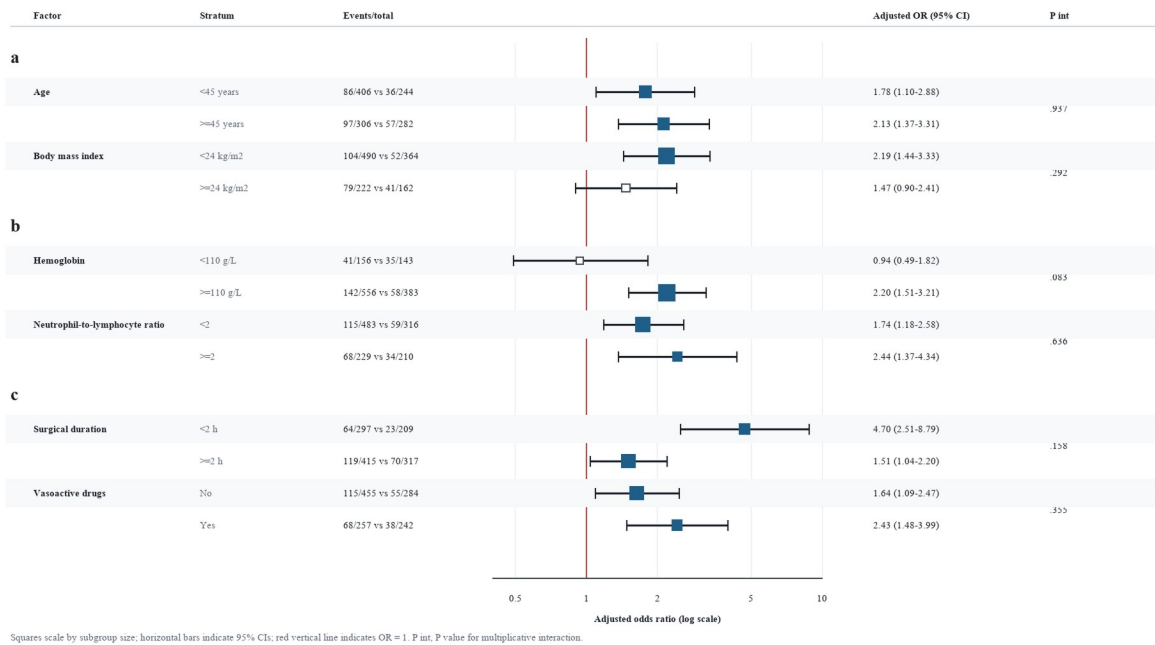
Observed event rates and mean predicted risks across tertiles of predicted probability.

Supplementary Figure 3. Analytic strategy consistency



Odds ratios and 95% confidence intervals across unmatched, propensity-score matched, overlap-weighted, inverse-probability weighted, and fully adjusted analyses.

Supplementary Figure 4. Subgroup and interaction analysis



Prespecified subgroup-specific odds ratios and 95% confidence intervals for the association between bowel preparation type and postoperative CRP elevation.

Supplementary Table 1. Prespecified subgroup and interaction analysis

Factor	Stratum	Lactulose events/n	Mechanical events/n	Adjusted OR	95% CI	P value	P interaction
Age	<45 years	86/406	36/244	1.78	1.10-2.88	0.0191	0.9369
Age	≥45 years	97/306	57/282	2.13	1.37-3.31	0.0008	-
Body mass index	<24 kg/m ²	104/490	52/364	2.19	1.44-3.33	0.0002	0.2924
Body mass index	≥24 kg/m ²	79/222	41/162	1.47	0.90-2.41	0.1270	-
Hemoglobin	<110 g/L	41/156	35/143	0.94	0.49-1.82	0.8612	0.0832
Hemoglobin	≥110 g/L	142/556	58/383	2.20	1.51-3.21	<0.0001	-
Neutrophil-to-lymphocyte ratio	<2	115/483	59/316	1.74	1.18-2.58	0.0057	0.6359
Neutrophil-to-lymphocyte ratio	≥2	68/229	34/210	2.44	1.37-4.34	0.0024	-
Surgical duration	<2 h	64/297	23/209	4.70	2.51-8.79	<0.0001	0.1578
Surgical duration	≥2 h	119/415	70/317	1.51	1.04-2.20	0.0313	-
Vasoactive drugs	No	115/455	55/284	1.64	1.09-2.47	0.0172	0.3554
Vasoactive drugs	Yes	68/257	38/242	2.43	1.48-3.99	0.0005	-

Supplementary Table 2. Exploratory perioperative prediction model**Panel A. Model coefficients**

Predictor	Adjusted OR	95% CI	P value
Lactulose enema (vs mechanical enema)	1.94	1.44-2.62	<0.0001
Body mass index, per 1 kg/m ²	1.09	1.04-1.14	0.0003
Heart rate, per 10 beats/min	0.76	0.68-0.85	<0.0001
Systolic blood pressure, per 10 mmHg	1.19	1.10-1.29	<0.0001
Hemoglobin, per 10 g/L	0.90	0.83-0.98	0.0134
White blood cell count, per 1 ×10 ⁹ /L	1.11	1.02-1.20	0.0109
Surgical duration, per 1 h	1.23	1.03-1.46	0.0200
Infusion quantity, per 500 mL	1.39	1.14-1.70	0.0010

Panel B. Model performance

Metric	Value
Patients, n	1238
Events, n	276
Apparent AUC	0.708
Bootstrap-corrected AUC	0.696
Brier score	0.155
Mean bootstrap calibration slope	0.936
Calibration slope 95% CI	0.79-1.11

Panel C. Predicted-risk groups

Risk group	Predicted probability range	Patients, n	Observed CRP elevation (%)	Mean predicted risk (%)
Low	2.5-14.3	412	10.0	9.9
Intermediate	14.3-24.8	411	23.1	19.2
High	25.0-73.1	415	33.7	37.7