

Role of hematological biomarkers in predicting oncological outcomes of definitive chemoradiation in locally advanced vulvar carcinoma

SUPPLEMENTARY FILE

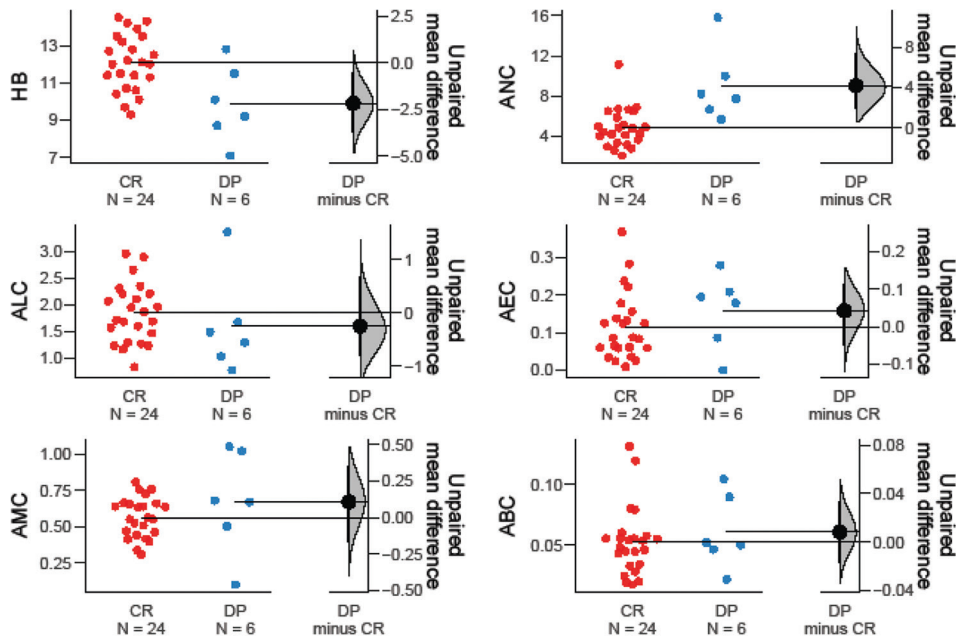


Figure S1. Unpaired mean differences between DP and CR in HB level, ALC, AMC, ANC, AEC, and ABC.
 Abbreviations: DP: Disease progression; CR; Complete response; HB: Hemoglobin; ALC: Absolute lymphocyte count, AMC: Absolute monocyte count; ANC: Absolute neutrophil count; AEC: Absolute eosinophil count; ABC: Absolute basophil count.

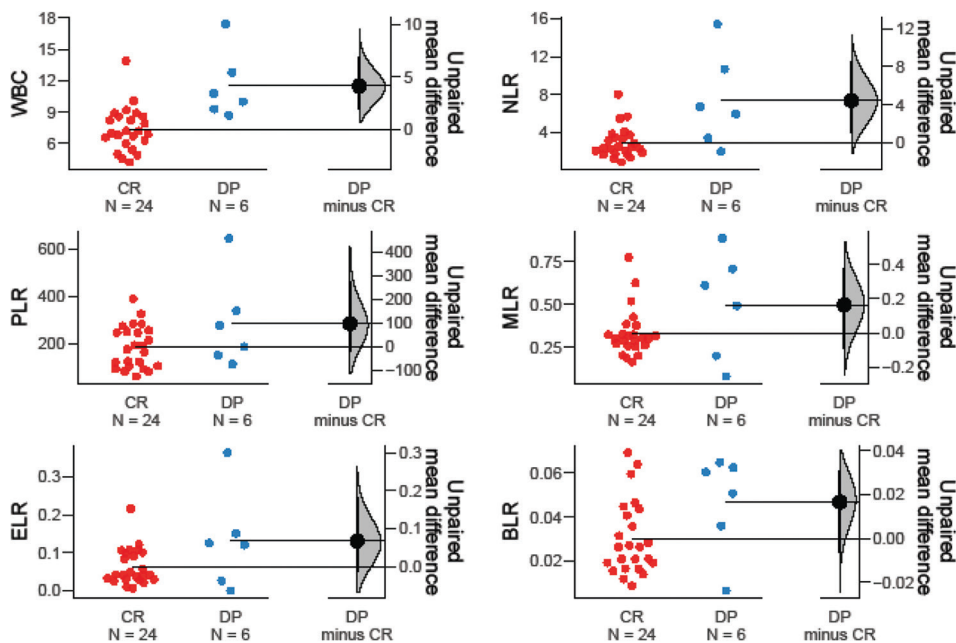


Figure S2. Unpaired mean differences between DP and CR in WBC count, PLR, ELR, NLR, MLR, and BLR.
 Abbreviations: DP: Disease progression; CP: Complete response; WBC: White blood cell; PLR: Platelet-to-lymphocyte ratio; ELR: Eosinophil-to-lymphocyte ratio; NLR: Neutrophil-to-lymphocyte ratio; MLR: Monocyte-to-lymphocyte ratio; BLR: Basophil-to-lymphocyte ratio.

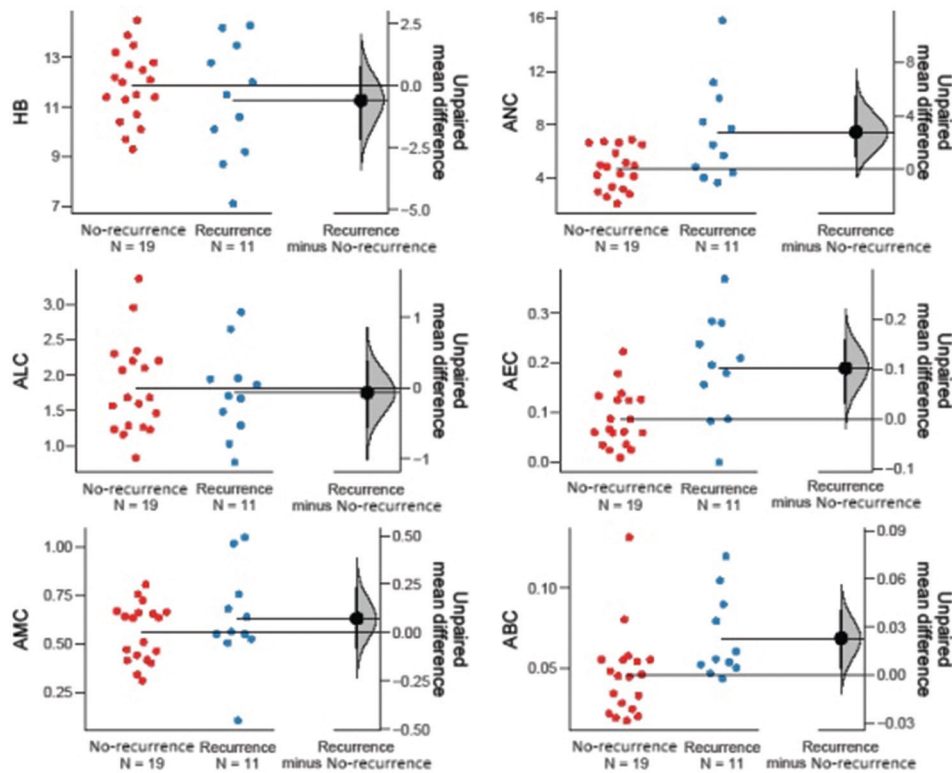


Figure S3. Unpaired mean differences between recurrence and no recurrence in HB level, ALC, AMC, ANC, AEC, and ABC. Abbreviations: HB: Hemoglobin; ALC: Absolute lymphocyte count; AMC: Absolute monocyte count; ANC: Absolute neutrophil count; AEC: Absolute eosinophil count; ABC: Absolute basophil count.

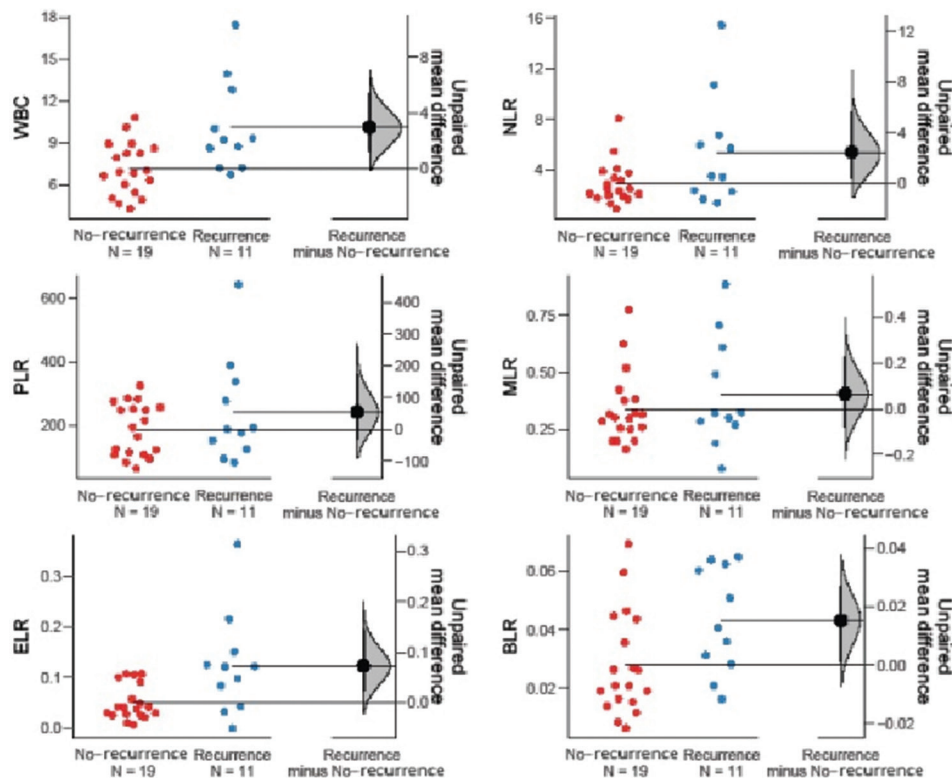


Figure S4. Unpaired mean differences between recurrence and no recurrence in WBC count, PLR, ELR, NLR, MLR, and BLR. Abbreviations: WBC: Blood cell count; PLR: Platelet-to-lymphocyte ratio; ELR: Eosinophil-to-lymphocyte ratio; NLR: Neutrophil-to-lymphocyte ratio; MLR: Monocyte-to-lymphocyte ratio; BLR: Basophil-to-lymphocyte ratio.

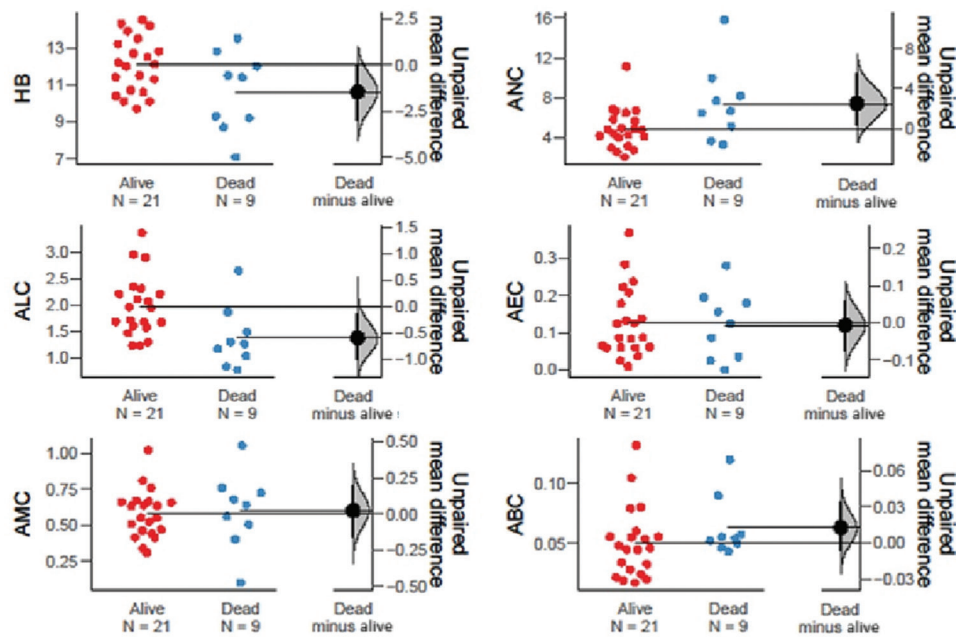


Figure S5. Unpaired mean differences between dead and alive cases in HB level, ALC, AMC, ANC, AEC, and ABC.

Abbreviations: HB: Hemoglobin; ALC: Absolute lymphocyte count; AMC: Absolute monocyte count; ANC: Absolute neutrophil count, AEC: Absolute eosinophil count; ABC: Absolute basophil count.

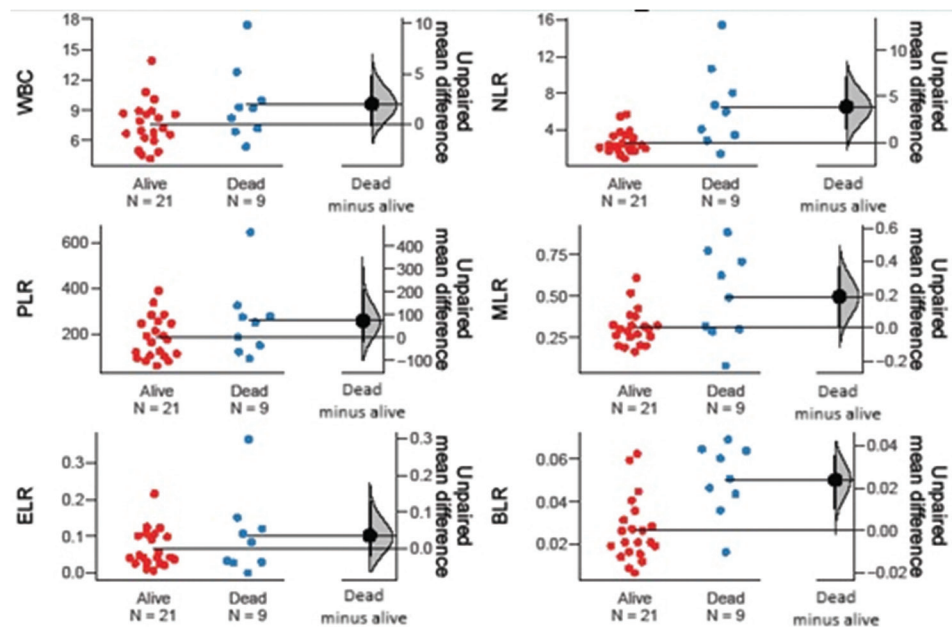


Figure S6. Unpaired mean differences between dead and alive cases in WBC count, PLR, ELR, NLR, MLR, and BLR.

Abbreviations: WBC: White blood cell; PLR: Platelet-to-lymphocyte ratio; ELR: Eosinophil-to-lymphocyte ratio; NLR: Neutrophil-to-lymphocyte ratio; MLR: Monocyte-to-lymphocyte ratio; BLR: Basophil-to-lymphocyte ratio.

Table S1. Receiver operating characteristic analysis of hematological markers for predicting survival

Variable	Cut-off	Specificity	Sensitivity	AUC
NLR*	3.4	80.9	77.8	83.1
ABCr*	0.035	80.9	88.9	83.3

Note: *Among the 13 hematological markers used in this study, only NLR and ABCr produced receiver operating characteristic curves with optimal values that were significantly different from those obtained by chance.

Abbreviations: ABCr: Absolute basophil count ratio; AUC: Area under the curve; NLR: Neutrophil-to-lymphocyte ratio.

Table S2. Markers associated with treatment response (categorized according to receiver operating characteristic values)

Variable	Value	CR	DP	p-value	OR
NLR	Below ROC	17 (70.8%)	2 (33.3%)	0.156	0.206 (0.030 – 1.393)
	Above ROC	7 (29.2%)	4 (66.7%)		
ABCr	Below ROC	17 (70.8%)	1 (16.7%)	0.026*	0.082 (0.008 – 0.838)
	Above ROC	7 (29.2%)	5 (83.3%)		

Note: * indicates statistical significance ($p \leq 0.05$).

Abbreviations: ABCr: Absolute basophil count ratio; CR: Complete response; DP: Disease progression; NLR: Neutrophil-to-lymphocyte ratio; OR: Odds ratio; ROC: Receiver operating characteristic.

Table S3. Mean survival among groups categorized according to receiver operating characteristic values

Variable	Values	OS				PFS			
		Mean	Lower	Upper	p-value	Mean	Lower	Upper	p-value
NLR	Below ROC	70.8	60.7	81.1	0.001*	58.4	43.5	73.3	0.027*
	Above ROC	20.5	13.9	27.0		18.2	10.8	25.5	
ABCr	Below ROC	74.0	65.3	82.8	0.000*	62.4	48.3	76.5	0.015*
	Above ROC	26.1	12.6	39.6		24.8	9.1	40.6	

Note: * indicates statistical significance ($p \leq 0.05$).

Abbreviations: ABCr: Absolute basophil count ratio; NLR: Neutrophil-to-lymphocyte ratio; OR: Odds ratio; OS: Overall survival; PFS: Progression-free survival; ROC: Receiver operating characteristic.