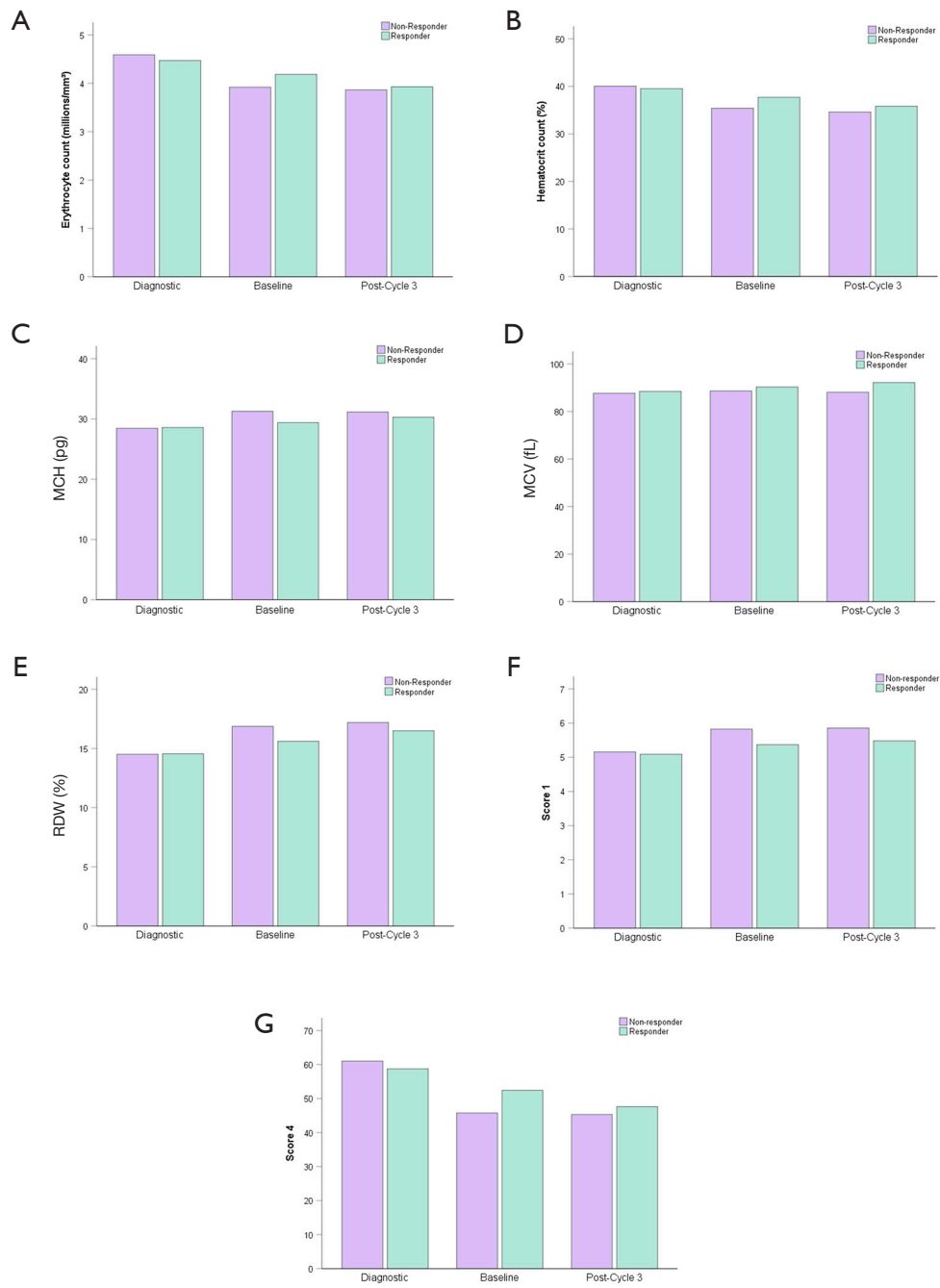


**Table S1** A comparative analysis of hematological parameters was conducted between responder patients (n=74) and non-responders (n=31) at three distinct time points: diagnosis, baseline, and post-cycle 3 of treatment with ICIs

Characteristic	Non-responder (n=31)	Responder (n=74)	P
Erythrocytes (millions/mm <sup>3</sup> )			
Diagnostic	4.6 (0.6)	4.5 (0.6)	0.54 <sup>‡</sup>
Baseline	3.9 (0.7)	4.1 (0.6)	0.07 <sup>†</sup>
Post-cycle 3	3.8 (0.9)	4.0 (0.7)	0.51 <sup>†</sup>
Hemoglobin (g/dL)			
Diagnostic	13.2 (2.1)	13.0 (1.9)	0.93 <sup>†</sup>
Baseline	11.7 (1.9)	12.2 (1.9)	0.04 <sup>†*</sup>
Post-cycle 3	11.3 (2.3)	12.0 (1.9)	0.14 <sup>†</sup>
Hematocrit (%)			
Diagnostic	40.8 (5.7)	40.3 (5.5)	0.81 <sup>†</sup>
Baseline	35.7 (5.5)	37.8 (5.6)	0.07 <sup>†</sup>
Post-cycle 3	35.0 (7.0)	36.0 (6.0)	0.26 <sup>†</sup>
MCV (fL)			
Diagnostic	87.5 (5.6)	89.0 (5.3)	0.41 <sup>‡</sup>
Baseline	91.0 (14.6)	91.0 (6.5)	0.79 <sup>‡</sup>
Post-cycle 3	93.0 (16.0)	92.0 (6.0)	0.54 <sup>‡</sup>
MCH (pg)			
Diagnostic	28.0 (2.1)	29.0 (3.8)	0.21 <sup>‡</sup>
Baseline	29.5 (11.3)	29.8 (2.5)	0.91 <sup>‡</sup>
Post-cycle 3	30.0 (12.5)	30.0 (2.1)	0.34 <sup>‡</sup>
MCHC (g/dL)			
Diagnostic	32.3 (1.2)	32.9 (1.4)	0.45 <sup>‡</sup>
Baseline	32.0 (1.4)	33.0 (1.2)	0.053 <sup>‡</sup>
Post-cycle 3	32.0 (1.1)	33.0 (1.3)	0.03 <sup>†*</sup>
RDW (%)			
Diagnostic	14.4 (1.4)	14.4 (1.2)	0.78 <sup>‡</sup>
Baseline	15.7 (3.4)	15.0 (2.2)	0.07 <sup>‡</sup>
Post-cycle 3	16.4 (3.8)	15.8 (2.8)	0.38 <sup>‡</sup>
MPHH			
Diagnostic	364.0 (500.0)	382.0 (825.0)	0.62 <sup>‡</sup>
Baseline	455.0 (1143.0)	341.0 (579.0)	0.04 <sup>†*</sup>
Post-cycle 3	457.0 (902.0)	266.0 (395.0)	0.10 <sup>‡</sup>
Score 1			
Diagnostic	5.1 (0.8)	5.0 (0.8)	0.61 <sup>‡</sup>
Baseline	5.7 (1.3)	5.2 (1.0)	0.09 <sup>‡</sup>
Post-cycle 3	5.6 (1.2)	5.3 (1.0)	0.10 <sup>‡</sup>
Score 2			
Diagnostic	1,125.0 (215.0)	1,170.0 (202.0)	0.75 <sup>‡</sup>
Baseline	1,021.0 (242.0)	1,109.0 (206.0)	0.07 <sup>‡</sup>
Post-cycle 3	988.0 (260.0)	1,091.0 (170.0)	0.02 <sup>†*</sup>
Score 3			
Diagnostic	444.0 (78.0)	429.0 (72.0)	0.80 <sup>‡</sup>
Baseline	375.0 (70.0)	394.0 (70.0)	0.02 <sup>†*</sup>
Post-cycle 3	362.0 (73.0)	396.0 (67.0)	0.04 <sup>†*</sup>
Score 4			
Diagnostic	61.0 (17.0)	60.0 (15.0)	0.67 <sup>†</sup>
Baseline	47.0 (15.0)	50.0 (15.0)	0.06 <sup>‡</sup>
Post-cycle 3	44.0 (18.0)	46.0 (16.0)	0.36 <sup>†</sup>

Data are presented as mean (standard deviation). <sup>†</sup>, Student's *t*-test; <sup>‡</sup>, Mann-Whitney test; \*, P<0.05. ICIs, immune checkpoint inhibitors; MCH, mean corpuscular hemoglobin; MCHC, mean corpuscular hemoglobin concentration; MCV, mean corpuscular volume; MPHH = [(monocyte × platelet)/(hemoglobin × hematocrit)]; RDW, red cell distribution width; Score 1 = (RDW × erythrocyte)/(hemoglobin); Score 2 = (MCV × hemoglobin); Score 3 = (MCHC × hemoglobin); Score 4 = (hemoglobin × erythrocyte).



**Figure S1** A comparative analysis of hematological parameters between responders and non-responders to treatment with ICIs at the diagnosis, baseline and post-cycle 3. (A) Erythrocyte; (B) hematocrit; (C) MCH; (D) MCV; (E) RDW; (F) Score 1 (RDW × erythrocyte); and (G) Score 4 (hemoglobin × erythrocyte). MCH, mean corpuscular hemoglobin; MCV, mean corpuscular volume; RDW, red cell distribution width.