

Supplementary

Table S1 Correlation of systemic inflammatory markers with pathologic regression

Systemic inflammatory markers	r	P value
Pre-treatment		
NLR	0.17	0.31
SLR	-0.30	0.07
BLR	-0.27	0.12
Post-treatment		
NLR	-0.02	0.89
SLR	-0.31	0.06
BLR	-0.27	0.11
Percentage variation ($\Delta\%$)		
Δ NLR%	-0.34	0.045
Δ SLR%	0.02	0.92
Δ BLR%	-0.15	0.38

NLR, neutrophil-to-lymphocyte ratio; SLR, spleen-to-liver ratio; BLR, bone marrow-to-liver ratio.

Table S2 Characteristics of neutrophil and lymphocyte with MPR

Neutrophil and lymphocyte	Patients with MPR (n=13), median (range)	Patients without MPR (n=23), median (range)	P value
Pre-treatment			
Absolute neutrophil count	5.3 (2.6, 10.0)	4.8 (2.5, 22.4)	0.97
Absolute lymphocyte count	1.8 (0.5, 4.5)	1.9 (1.0, 2.6)	0.95
Post-treatment			
Absolute neutrophil count	4.0 (1.9, 8.0)	4.7 (2.1, 26.4)	0.12
Absolute lymphocyte count	2.0 (0.6, 4.0)	1.8 (0.8, 2.9)	0.87
Percentage variation ($\Delta\%$)			
Absolute neutrophil count	-25.4 (-66.1, 23.2)	4.7 (-58.7, 124.0)	0.03
Absolute lymphocyte count	-3.2 (-18.9, 37.0)	-2.5 (-44.8, 36.2)	0.87

MPR, major pathologic response.

Table S3 Correlation of neutrophil and lymphocyte with pathologic regression

Neutrophil and lymphocyte	r	P value
Pre-treatment		
Absolute neutrophil count	0.14	0.42
Absolute lymphocyte count	-0.07	0.70
Post-treatment		
Absolute neutrophil count	-0.12	0.49
Absolute lymphocyte count	-0.08	0.66
Percentage variation ($\Delta\%$)		
Absolute neutrophil count	-0.37	0.03
Absolute lymphocyte count	0.03	0.86

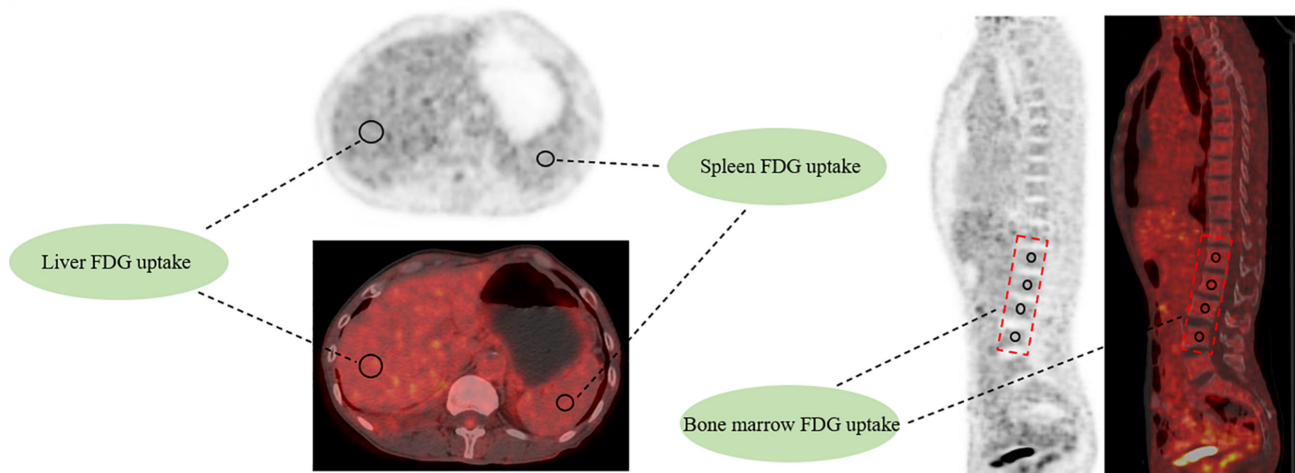


Figure S1 The measurement of liver, spleen and bone marrow FDG uptake. FDG, fluorodeoxyglucose.

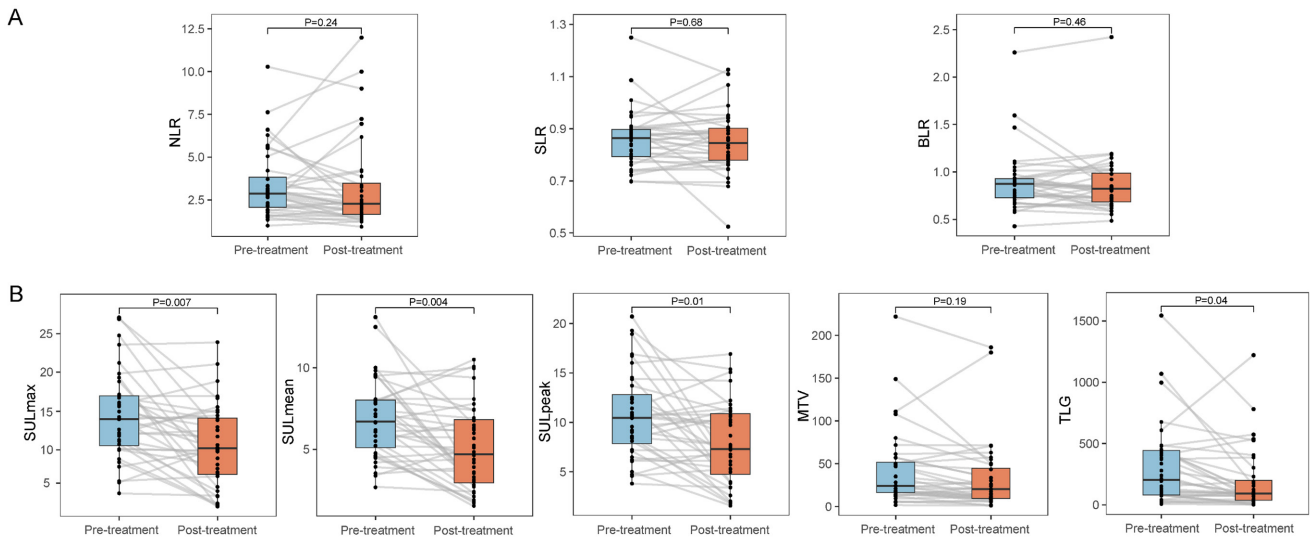


Figure S2 Distribution and variation of systemic inflammatory markers (A) and primary tumor metabolism (B) before and after neoadjuvant sintilimab. NLR, neutrophil-to-lymphocyte ratio; SLR, spleen-to-liver ratio; BLR, bone marrow-to-liver ratio; SUL, standardized uptake value corrected by lean body mass; MTV, metabolic tumor volume; TLG, total lesion glycolysis.

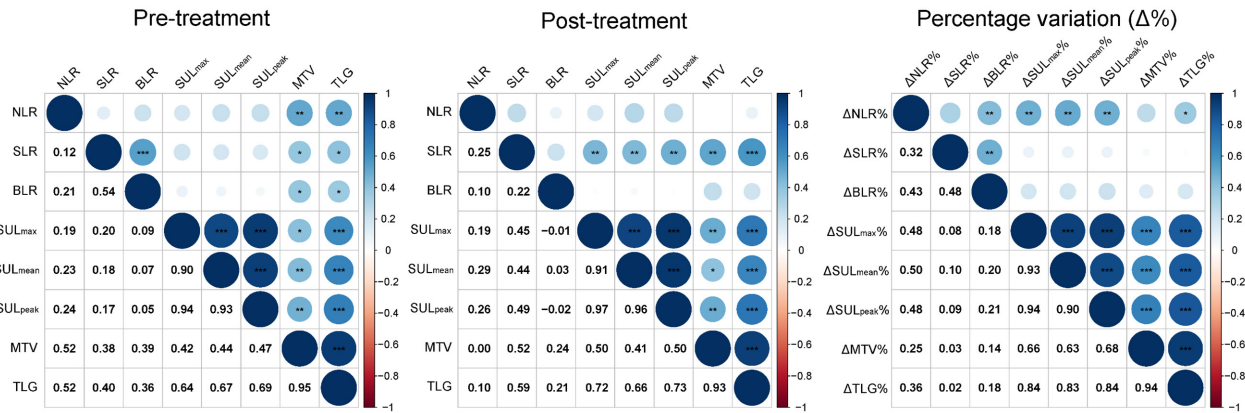


Figure S3 Correlation between systemic inflammatory markers and primary tumor metabolism at various time points. *, $P<0.05$; **, $P<0.01$; ***, $P<0.001$; Spearman's correlation. NLR, neutrophil-to-lymphocyte ratio; SLR, spleen-to-liver ratio; BLR, bone marrow-to-liver ratio; SUL, standardized uptake value corrected by lean body mass; MTV, metabolic tumor volume; TLG, total lesion glycolysis.