

Table S1 Intra- and inter-observer agreement for nCRT-related mpMRI quantitative parameters (ICC)

Characteristics	Intra-observer (95% CI)	Inter-observer (95% CI)
Pre-ADC	0.887 (0.849, 0.927)	0.935 (0.886, 0.975)
Post-ADC	0.964 (0.913, 0.995)	0.884 (0.826, 0.941)
Pre-Ktrans	0.880 (0.836, 0.933)	0.947 (0.903, 0.991)
Post-Ktrans	0.852 (0.797, 0.896)	0.914 (0.856, 0.949)
Pre-Ve	0.974 (0.957, 0.991)	0.984 (0.976, 1.000)
Post-Ve	0.963 (0.935, 0.990)	0.889 (0.856, 0.926)
Pre-Kep	0.856 (0.813, 0.901)	0.941 (0.916, 0.986)
Post-Kep	0.949 (0.916, 0.983)	0.928 (0.877, 0.957)

mpMRI, multiparametric magnetic resonance imaging; nCRT, neoadjuvant chemoradiotherapy; ICC, intraclass correlation coefficient; ADC, apparent diffusion coefficient; Ktrans, volume transfer constant; pre-, before nCRT; post-, after nCRT; 95% CI, 95% confidence interval.

Table S2 Comparison of clinical characteristics between non-RM and RM groups in rectal cancer patients

Characteristics	non-RM group (n=61)	RM group (n=25)	t/ χ^2 value	P value
Tumor height (mm)	44.71±21.72	41.62±24.20	0.578	0.42
mrT stage			2.773	0.428
1	2 (3.3)	3 (12.0)		
2	7 (11.5)	4 (16.0)		
3	39 (63.9)	13 (52.0)		
4	13 (21.3)	5 (20.0)		
mrN stage			4.954	0.084
0	31 (50.8)	18 (72.0)		
1	25 (41.0)	4 (16.0)		
2	5 (8.2)	3 (12.0)		
EMVI			–	0.057
Positive	2 (3.3)	4 (16.0)		
Negative	59 (96.7)	21 (84.0)		
MRF			0.444	0.505
Positive	13 (21.3)	7 (28.0)		
Negative	48 (78.7)	18 (72.0)		
CRM			–	0.014
Positive	4 (6.6)	14 (56.0)		
Negative	57(93.4)	11 (44.0)		
Adjuvant chemotherapy			0.141	0.707
Yes	32 (52.5)	12 (48.0)		
No	29 (47.5)	13 (52.0)		
Surgical approach			0.643	0.725
LAR	35 (57.4)	14 (56.0)		
APR	8 (13.1)	2 (8.0)		
ISR	18 (29.5)	9 (36.0)		
mrTRG			3.997	0.046
Good response	41 (67.2)	11 (44.0)		
Poor response	20 (32.8)	14 (56.0)		

Continuous variables were expressed as the mean ± standard deviation, whereas categorical variables were described as counts and percentages (n, %). mrT (1–4), T1–4 stages; mrN (0–2), N0–2 stages. Good Response represents mrTRG 1–2; Poor Response represents mrTRG 3–5; EMVI, extramural venous invasion; MRF, mesorectal fascia; CRM, circumferential resection margin; mrTRG, magnetic resonance tumor regression grade; LAR, low anterior resection; APR, abdominoperineal resection; ISR, intersphincteric resection.