

**Impact of Subcutaneous Adipose Tissue Index Change During Neoadjuvant Chemoradiotherapy
on Disease-Free Survival and Tumor Response in Patients With Locally Advanced Rectal Cancer**

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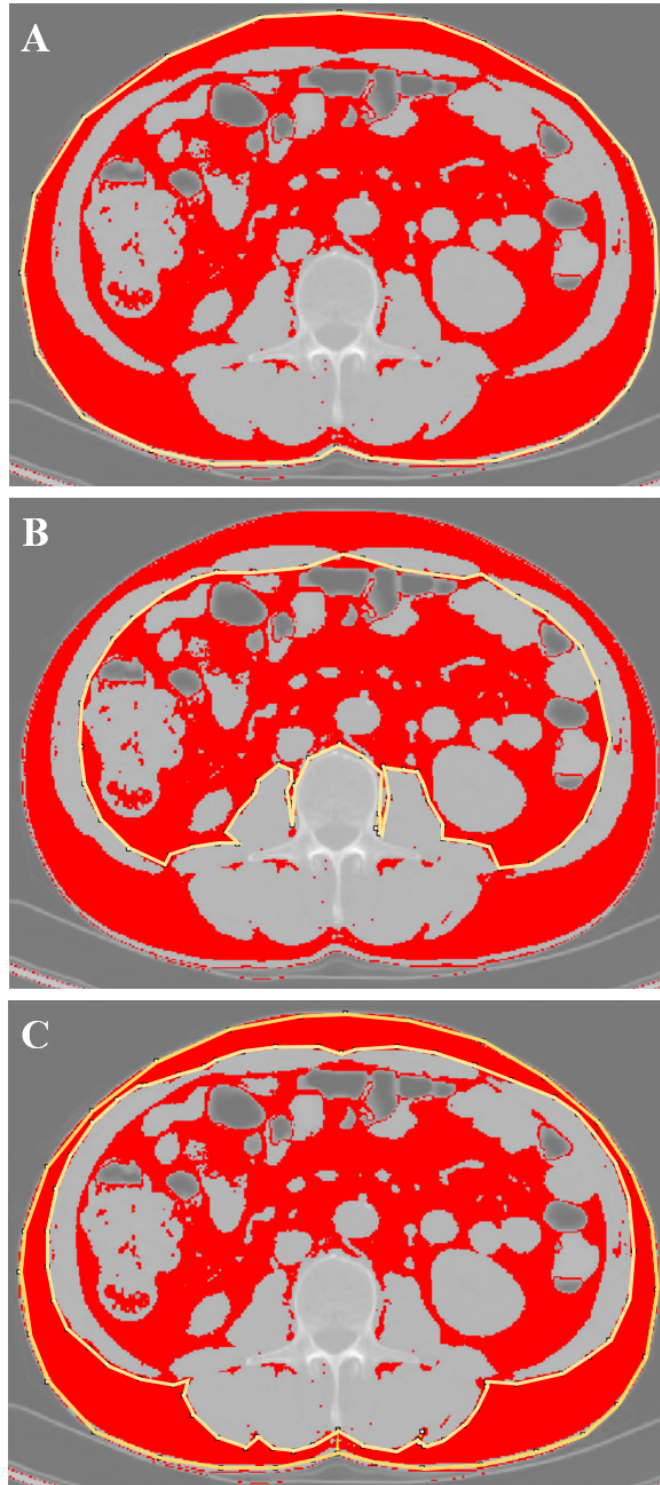


Figure S1. CT-based cross-sectional image at the third lumbar (L3) measured for TATA (A), VATA (B), and SATA (C) using ImageJ software v1.47i (National Institutes of Health, Bethesda, MD). The area delineated by the yellow solid line represents the region of interest.

Table S1. Baseline characteristics of the patients

Characteristics	Overall
Sex, n (%)	
Male	206 (71%)
Female	84 (29%)
Age, median (IQR)	61 (53, 68)
BMI, mean $\pm$ sd	24.167 $\pm$ 3.2384
Tumor location, n (%)	
High	26 (9%)
Mid	160 (55.2%)
Low	104 (35.9%)
Tumor size, n (%)	
≤ 5 cm	173 (59.7%)
> 5 cm	117 (40.3%)
Clinical T stage, n (%)	
2-3	234 (80.7%)
4	56 (19.3%)
Clinical N status, n (%)	
Negative	55 (19%)
Positive	235 (81%)
ypTNM, n (%)	
0	48 (16.6%)
I-IV	242 (83.4%)
CEA, n (%)	
≤ 5 ng/L	247 (85.2%)
> 5 ng/L	43 (14.8%)
Hemoglobin, median (IQR)	129 (119, 139)
Albumin, median (IQR)	41.8 (38.8, 44.375)
TRG, n (%)	
0	50 (17.2%)
1	110 (37.9%)
2	100 (34.5%)
3	30 (10.3%)

BMI body mass index, **ypTNM** pathological TNM stage, **CEA** carcinoembryonic antigen, **TRG**

tumor regression grade

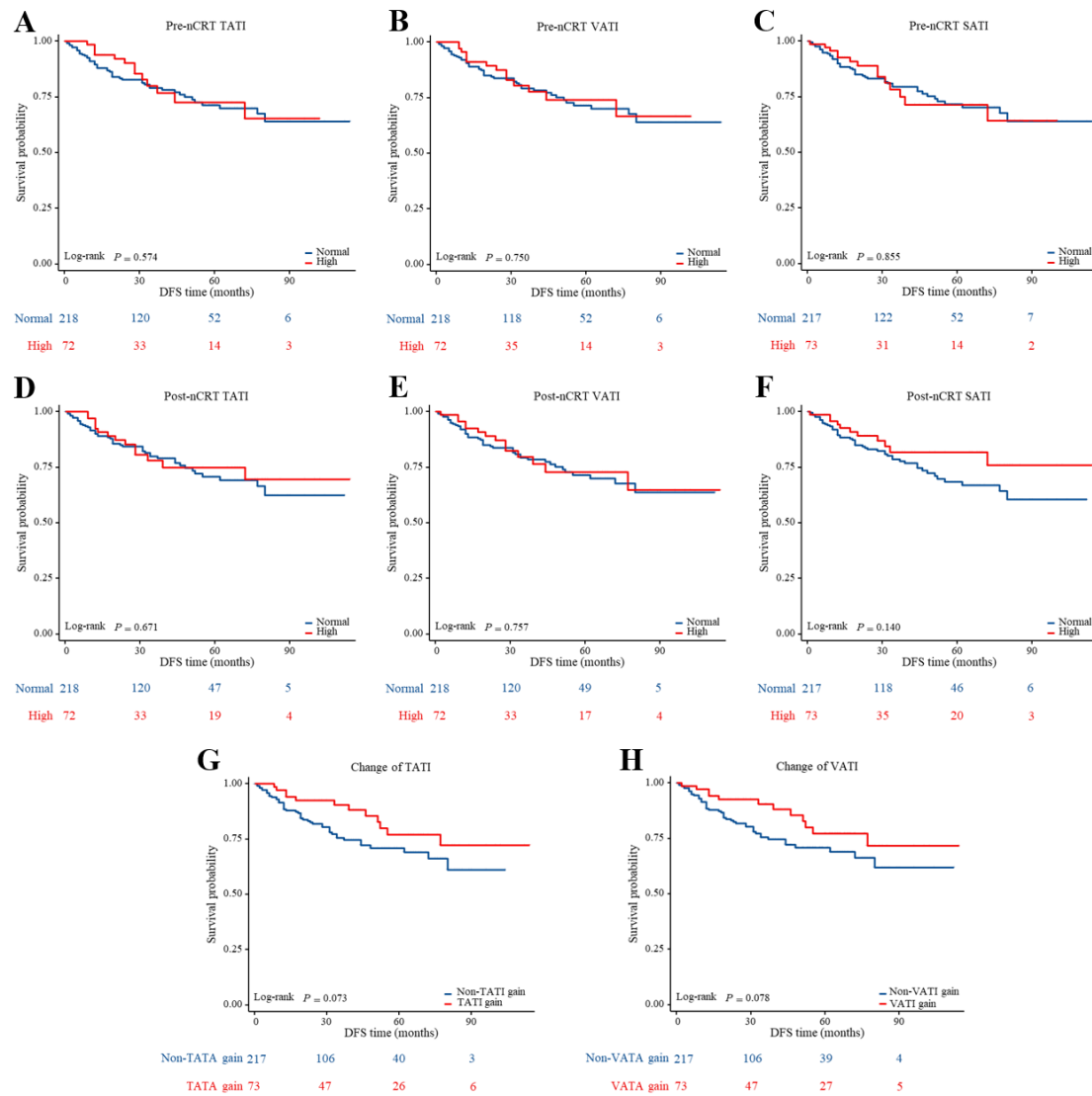


Figure S2. Kaplan-Meier analysis for DFS according to adipose tissue area and change of adipose tissue index.

(A) Kaplan–Meier analysis for DFS rate between normal pre-TATI and high pre-TATI groups in LARC patients ($P = 0.574$); (B) Kaplan–Meier analysis for DFS rate between normal pre-VATI and high pre-VATI groups in LARC patients ($P = 0.750$); (C) Kaplan–Meier analysis for DFS rate between normal pre-SATI and high pre-SATI groups in LARC patients ($P = 0.855$); (D) Kaplan–Meier analysis for DFS rate between normal post-TATI and high post-TATI groups in LARC patients ($P = 0.671$); (E) Kaplan–Meier analysis for DFS rate between normal post-VATI and high post-VATI groups in LARC patients ($P = 0.757$); (F) Kaplan–Meier analysis for DFS rate between

normal post-SATI and high post-SATI groups in LARC patients ($P = 0.140$); (G) Kaplan–Meier analysis for DFS rate between non-TATI gain and TATI gain groups in LARC patients ($P = 0.073$); (H) Kaplan–Meier analysis for DFS rate between non-VATI gain and VATI gain groups in LARC patients ($P = 0.078$).

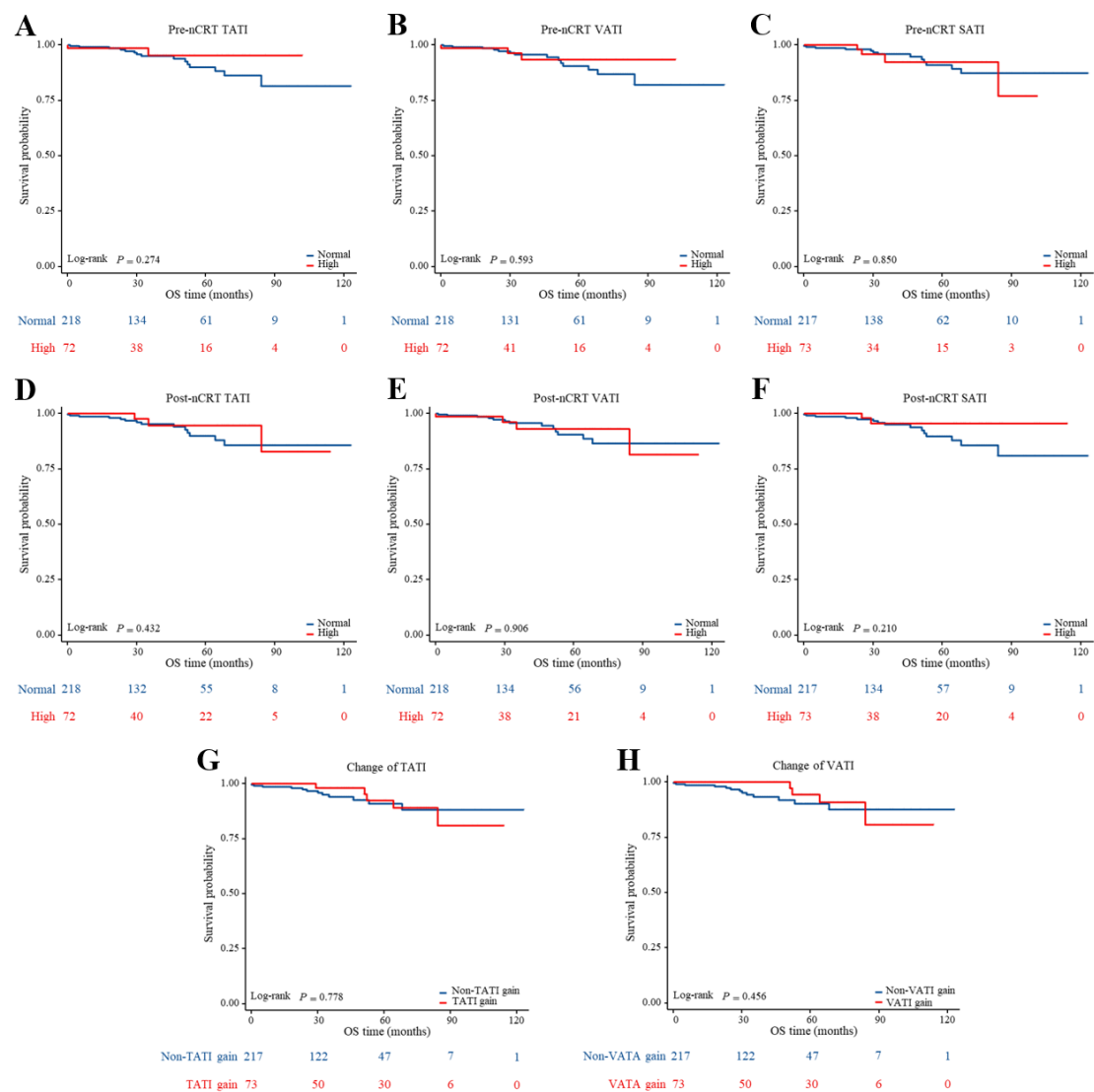


Figure S3. Kaplan-Meier analysis for OS according to adipose tissue area and change of adipose tissue area.

(A) Kaplan–Meier analysis for OS rate between normal pre-TATA and high pre-TATA groups in LARC patients ($P = 0.274$); (B) Kaplan–Meier analysis for OS rate between normal pre-VATA and high pre-VATA groups in LARC patients ($P = 0.593$); (C) Kaplan–Meier analysis for OS rate between normal pre-SATA and high pre-SATA groups in LARC patients ($P = 0.850$); (D) Kaplan–Meier analysis for OS rate between normal post-TATA and high post-TATA groups in LARC patients ($P = 0.432$); (E) Kaplan–Meier analysis for OS rate between normal post-VATA and high post-VATA groups in LARC patients ($P = 0.906$); (F) Kaplan–Meier analysis for OS rate between normal post-

SATA and high post-SATA groups in LARC patients ($P = 0.210$); (G) Kaplan–Meier analysis for OS rate between non-TATA gain and TATA gain groups in LARC patients ($P = 0.778$); (H) Kaplan–Meier analysis for OS rate between non-VATA gain and VATA gain groups in LARC patients ($P = 0.456$).