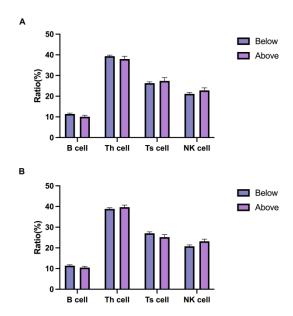
Supplementary Table 1 Clinicopathological characteristics of 94 patients with CRC.

Gender-no. (%)  Male	Characteristics	Patients (n=94)
Female 46 (48.9%) Age (mean, y) 64.42 Tumor size (mean, cm) 5.70 Tumor location-no. (%) Left colon 42 (44.7%) Right colon 52 (55.3%) Histological type-no. (%) Adenocarcinoma 93 (98.9%) Others 1 (1.1%) Lymphovascular invasion-no. (%) Positive 37 (39.4%) Negative 57 (60.6%) Perineural invasion-no. (%) Positive 17 (18.1%) Negative 77 (81.9%) PT category-no. (%) T2 7 (7.4%) T3 35 (37.2%) T4 52 (55.4%) PN category-no. (%) N0 56 (59.6%) N1 24 (25.5%) N2 14 (14.9%) PM category-no. (%) M0 91 (96.8%) M1 3 (3.2%) PTNM stage-no. (%) Stage I 7 (7.4%) Stage II 44 (46.8%) Stage III 44 (46.8%) Stage IV 3 (3.2%) tissue Cholesterol-no. (%) Low 48 (51.1%) High 46 (48.9%)	Gender-no. (%)	
Age (mean, y) 64.42 Tumor size (mean, cm) 5.70 Tumor location-no. (%)  Left colon 42 (44.7%) Right colon 52 (55.3%)  Histological type-no. (%)  Adenocarcinoma 93 (98.9%) Others 1 (1.1%)  Lymphovascular invasion-no. (%)  Positive 37 (39.4%) Negative 57 (60.6%)  Perineural invasion-no. (%)  Positive 17 (18.1%) Negative 77 (81.9%)  PT category-no. (%)  T2 7 (7.4%)  T3 35 (37.2%)  T4 52 (55.4%)  pN category-no. (%)  N0 56 (59.6%) N1 24 (25.5%) N2 14 (14.9%)  pM category-no. (%)  M0 91 (96.8%) M1 3 (3.2%)  pTNM stage-no. (%)  Stage I 7 (7.4%) Stage II 44 (46.8%) Stage III 40 (42.6%) Stage IV 3 (3.2%)  tissue Cholesterol-no. (%)  Low 48 (51.1%) High 46 (48.9%)	Male	48 (51.1%)
Tumor size (mean, cm)  Tumor location-no. (%)  Left colon  Right colon  Adenocarcinoma  Others  Uymphovascular invasion-no. (%)  Positive  Positive  Ta  Ta  Ta  Ta  Ta  Ta  Ta  Ta  Ta  T	Female	46 (48.9%)
Tumor location-no. (%)  Left colon  Right colon  S2 (55.3%)  Histological type-no. (%)  Adenocarcinoma  Others  1 (1.1%)  Lymphovascular invasion-no. (%)  Positive  37 (39.4%)  Negative  57 (60.6%)  Perineural invasion-no. (%)  Positive  17 (18.1%)  Negative  77 (81.9%)  pT category-no. (%)  T2  7 (7.4%)  T3  35 (37.2%)  T4  52 (55.4%)  pN category-no. (%)  N0  56 (59.6%)  N1  24 (25.5%)  N2  14 (14.9%)  pM category-no. (%)  M0  91 (96.8%)  M1  3 (3.2%)  pTNM stage-no. (%)  Stage I  Stage II  44 (46.8%)  Stage IV  3 (3.2%)  tissue Cholesterol-no. (%)  Low  48 (51.1%)  High  46 (48.9%)	Age (mean, y)	64.42
Left colon Right colon S12 (55.3%) Histological type-no. (%) Adenocarcinoma Others 1 (1.1%) Lymphovascular invasion-no. (%) Positive 37 (39.4%) Negative 57 (60.6%) Perineural invasion-no. (%) Positive 17 (18.1%) Negative 77 (81.9%) PT category-no. (%) T2 7 (7.4%) T3 35 (37.2%) T4 52 (55.4%) PN category-no. (%) N0 N0 56 (59.6%) N1 24 (25.5%) N2 14 (14.9%) PM category-no. (%) M0 91 (96.8%) M1 3 (3.2%) PTNM stage-no. (%) Stage I 57 (7.4%) Stage II 58 (46.8%) Stage III 59 (46.8%) Stage IV 3 (3.2%) tissue Cholesterol-no. (%) Low 48 (51.1%) High 46 (48.9%)	Tumor size (mean, cm)	5.70
Right colon  Histological type-no. (%)  Adenocarcinoma  Others  1 (1.1%)  Lymphovascular invasion-no. (%)  Positive  Negative  Perineural invasion-no. (%)  Positive  To ategory-no. (%)  To ategory-no. (%)  No  No  No  Society-no. (%)  No  No  No  No  No  No  No  No  No  N	Tumor location-no. (%)	
Histological type-no. (%)  Adenocarcinoma Others  1 (1.1%)  Lymphovascular invasion-no. (%)  Positive Negative  77 (60.6%)  Perineural invasion-no. (%)  Positive Negative  77 (81.9%)  pT category-no. (%)  T2 7 (7.4%)  T3 35 (37.2%)  T4 52 (55.4%)  pN category-no. (%)  N0 56 (59.6%)  N1 24 (25.5%)  N2 14 (14.9%)  pM category-no. (%)  M0 91 (96.8%)  M1 3 (3.2%)  pTNM stage-no. (%)  Stage I Stage II 44 (46.8%)  Stage IV 3 (3.2%)  tissue Cholesterol-no. (%)  Low High  46 (48.9%)	Left colon	42 (44.7%)
Adenocarcinoma Others Others 1 (1.1%)  Lymphovascular invasion-no. (%) Positive Negative 77 (60.6%)  Perineural invasion-no. (%) Positive Negative 77 (81.9%)  T2 7 (7.4%) T3 35 (37.2%) T4 52 (55.4%)  pN category-no. (%) N0 N0 S6 (59.6%) N1 24 (25.5%) N2 14 (14.9%)  pM category-no. (%) M0 M1 3 (3.2%)  pTNM stage-no. (%) Stage I Stage II 44 (46.8%) Stage III 40 (42.6%) Stage IV 15 (51.1%) High 46 (48.9%)	Right colon	52 (55.3%)
Others 1 (1.1%)  Lymphovascular invasion-no. (%)  Positive 37 (39.4%) Negative 57 (60.6%)  Perineural invasion-no. (%)  Positive 17 (18.1%) Negative 77 (81.9%)  PT category-no. (%)  T2 7 (7.4%)  T3 35 (37.2%)  T4 52 (55.4%)  pN category-no. (%)  N0 56 (59.6%)  N1 24 (25.5%)  N2 14 (14.9%)  pM category-no. (%)  M0 91 (96.8%)  M1 3 (3.2%)  pTNM stage-no. (%)  Stage I 7 (7.4%)  Stage II 44 (46.8%)  Stage II 40 (42.6%)  Stage IV 3 (3.2%)  tissue Cholesterol-no. (%)  Low 48 (51.1%)  High 46 (48.9%)	Histological type-no. (%)	
Lymphovascular invasion-no. (%)  Positive Negative 57 (60.6%)  Perineural invasion-no. (%)  Positive 17 (18.1%) Negative 77 (81.9%)  PT category-no. (%)  T2 7 (7.4%)  T3 35 (37.2%)  T4 52 (55.4%)  PN category-no. (%)  N0 56 (59.6%)  N1 24 (25.5%)  N2 14 (14.9%)  PM category-no. (%)  M0 91 (96.8%)  M1 3 (3.2%)  PTNM stage-no. (%)  Stage I  Stage II 44 (46.8%)  Stage III 40 (42.6%)  Stage IV  tissue Cholesterol-no. (%)  Low 48 (51.1%)  High 46 (48.9%)	Adenocarcinoma	93 (98.9%)
Positive 37 (39.4%) Negative 57 (60.6%)  Perineural invasion-no. (%)  Positive 17 (18.1%) Negative 77 (81.9%)  pT category-no. (%)  T2 7 (7.4%)  T3 35 (37.2%)  T4 52 (55.4%)  pN category-no. (%)  N0 56 (59.6%)  N1 24 (25.5%)  N2 14 (14.9%)  pM category-no. (%)  M0 91 (96.8%)  M1 3 (3.2%)  pTNM stage-no. (%)  Stage I 7 (7.4%)  Stage II 44 (46.8%)  Stage II 40 (42.6%)  Stage IV 3 (3.2%)  tissue Cholesterol-no. (%)  Low 48 (51.1%)  High 46 (48.9%)	Others	1 (1.1%)
Negative 57 (60.6%)  Perineural invasion-no. (%)  Positive 17 (18.1%)  Negative 77 (81.9%)  pT category-no. (%)  T2 7 (7.4%)  T3 35 (37.2%)  T4 52 (55.4%)  pN category-no. (%)  N0 56 (59.6%)  N1 24 (25.5%)  N2 14 (14.9%)  pM category-no. (%)  M0 91 (96.8%)  M1 3 (3.2%)  pTNM stage-no. (%)  Stage I 7 (7.4%)  Stage II 44 (46.8%)  Stage II 44 (46.8%)  Stage III 40 (42.6%)  Stage IV 3 (3.2%)  tissue Cholesterol-no. (%)  Low 48 (51.1%)  High 46 (48.9%)	Lymphovascular invasion-no. (%)	
Perineural invasion-no. (%)  Positive Negative 77 (81.9%)  PT category-no. (%)  T2 7 (7.4%)  T3 35 (37.2%)  T4 52 (55.4%)  PN category-no. (%)  N0 56 (59.6%)  N1 24 (25.5%)  N2 14 (14.9%)  PM category-no. (%)  M0 91 (96.8%)  M1 3 (3.2%)  PTNM stage-no. (%)  Stage I 7 (7.4%)  Stage II 44 (46.8%)  Stage III 40 (42.6%)  Stage IV 3 (3.2%)  tissue Cholesterol-no. (%)  Low 48 (51.1%) High 46 (48.9%)	Positive	37 (39.4%)
Positive 17 (18.1%) Negative 77 (81.9%)  pT category-no. (%)  T2 7 (7.4%)  T3 35 (37.2%)  T4 52 (55.4%)  pN category-no. (%)  N0 56 (59.6%)  N1 24 (25.5%)  N2 14 (14.9%)  pM category-no. (%)  M0 91 (96.8%)  M1 3 (3.2%)  pTNM stage-no. (%)  Stage I 7 (7.4%)  Stage II 44 (46.8%)  Stage III 44 (46.8%)  Stage III 40 (42.6%)  Stage IV 3 (3.2%)  tissue Cholesterol-no. (%)  Low 48 (51.1%)  High 46 (48.9%)	Negative	57 (60.6%)
Negative 77 (81.9%)  pT category-no. (%)  T2 7 (7.4%)  T3 35 (37.2%)  T4 52 (55.4%)  pN category-no. (%)  N0 56 (59.6%)  N1 24 (25.5%)  N2 14 (14.9%)  pM category-no. (%)  M0 91 (96.8%)  M1 3 (3.2%)  pTNM stage-no. (%)  Stage I 7 (7.4%)  Stage II 44 (46.8%)  Stage III 44 (46.8%)  Stage III 40 (42.6%)  Stage IV 3 (3.2%)  tissue Cholesterol-no. (%)  Low 48 (51.1%)  High 46 (48.9%)	Perineural invasion-no. (%)	
pT category-no. (%)  T2  T3  T4  T4  T52  T4  T52  T52  T52  T52  T	Positive	17 (18.1%)
T2	Negative	77 (81.9%)
T3 T4 T4 T5 (35 (37.2%) T4 T5 (55.4%)  pN category-no. (%) N0 N1 Stage I Stage II Stage III Stage III Stage IV T6 (48.9%)  T7 (7.4%) T6 (48.9%)  T7 (55.4%)  T8 (37.2%) T9 (55.4%) T9 (55.4%) T9 (55.4%) T9 (55.4%) T1 (14.9%) T1 (14.9%) T1 (14.9%) T1 (14.9%) T1 (14.9%) T2 (14.9%) T3 (3.2%) T1 (14.9%) T2 (14.9%) T3 (3.2%) T4 (14.9%) T4 (14.9%) T5 (14.9%) T6 (14.9%) T7 (7.4%) T6 (14.9%) T7 (7.4%) T7 (7.	pT category-no. (%)	
T4 52 (55.4%)  pN category-no. (%)  N0 56 (59.6%)  N1 24 (25.5%)  N2 14 (14.9%)  pM category-no. (%)  M0 91 (96.8%)  M1 3 (3.2%)  pTNM stage-no. (%)  Stage I 7 (7.4%)  Stage II 44 (46.8%)  Stage III 40 (42.6%)  Stage IV 3 (3.2%)  tissue Cholesterol-no. (%)  Low 48 (51.1%)  High 46 (48.9%)	T2	7 (7.4%)
pN category-no. (%)  N0  S6 (59.6%)  N1  24 (25.5%)  N2  14 (14.9%)  pM category-no. (%)  M0  91 (96.8%)  M1  3 (3.2%)  pTNM stage-no. (%)  Stage I  7 (7.4%)  Stage II  44 (46.8%)  Stage III  40 (42.6%)  Stage IV  3 (3.2%)  tissue Cholesterol-no. (%)  Low  48 (51.1%)  High  46 (48.9%)	Т3	35 (37.2%)
N0 56 (59.6%) N1 24 (25.5%) N2 14 (14.9%)  pM category-no. (%) M0 91 (96.8%) M1 3 (3.2%)  pTNM stage-no. (%) Stage I 7 (7.4%) Stage II 44 (46.8%) Stage III 40 (42.6%) Stage IV 3 (3.2%)  tissue Cholesterol-no. (%) Low 48 (51.1%) High 46 (48.9%)	T4	52 (55.4%)
N1	pN category-no. (%)	
N2  pM category-no. (%)  M0  91 (96.8%)  M1  3 (3.2%)  pTNM stage-no. (%)  Stage I  Stage II  44 (46.8%)  Stage III  40 (42.6%)  Stage IV  3 (3.2%)  tissue Cholesterol-no. (%)  Low  48 (51.1%)  High  46 (48.9%)	N0	56 (59.6%)
pM category-no. (%)  M0 91 (96.8%)  M1 3 (3.2%)  pTNM stage-no. (%)  Stage I 7 (7.4%)  Stage II 44 (46.8%)  Stage III 40 (42.6%)  Stage IV 3 (3.2%)  tissue Cholesterol-no. (%)  Low 48 (51.1%)  High 46 (48.9%)	N1	24 (25.5%)
M0 91 (96.8%) M1 3 (3.2%)  pTNM stage-no. (%)  Stage I 7 (7.4%)  Stage II 44 (46.8%)  Stage III 40 (42.6%)  Stage IV 3 (3.2%)  tissue Cholesterol-no. (%)  Low 48 (51.1%)  High 46 (48.9%)	N2	14 (14.9%)
M1 3 (3.2%)  pTNM stage-no. (%)  Stage I 7 (7.4%)  Stage II 44 (46.8%)  Stage III 40 (42.6%)  Stage IV 3 (3.2%)  tissue Cholesterol-no. (%)  Low 48 (51.1%)  High 46 (48.9%)	pM category-no. (%)	
pTNM stage-no. (%)  Stage I 7 (7.4%)  Stage II 44 (46.8%)  Stage III 40 (42.6%)  Stage IV 3 (3.2%)  tissue Cholesterol-no. (%)  Low 48 (51.1%)  High 46 (48.9%)	M0	91 (96.8%)
Stage I       7 (7.4%)         Stage II       44 (46.8%)         Stage III       40 (42.6%)         Stage IV       3 (3.2%)         tissue Cholesterol-no. (%)       48 (51.1%)         Low       48 (51.1%)         High       46 (48.9%)	M1	3 (3.2%)
Stage II       44 (46.8%)         Stage III       40 (42.6%)         Stage IV       3 (3.2%)         tissue Cholesterol-no. (%)       48 (51.1%)         Low       48 (51.1%)         High       46 (48.9%)	pTNM stage-no. (%)	
Stage III       40 (42.6%)         Stage IV       3 (3.2%)         tissue Cholesterol-no. (%)       48 (51.1%)         Low       48 (51.1%)         High       46 (48.9%)	Stage I	7 (7.4%)
Stage IV 3 (3.2%) tissue Cholesterol-no. (%) Low 48 (51.1%) High 46 (48.9%)	Stage II	44 (46.8%)
tissue Cholesterol-no. (%)  Low 48 (51.1%)  High 46 (48.9%)	Stage III	40 (42.6%)
Low 48 (51.1%) High 46 (48.9%)	Stage IV	3 (3.2%)
High 46 (48.9%)	tissue Cholesterol-no. (%)	
	Low	48 (51.1%)
tissue NK cells-no. (%)	High	46 (48.9%)
	tissue NK cells-no. (%)	

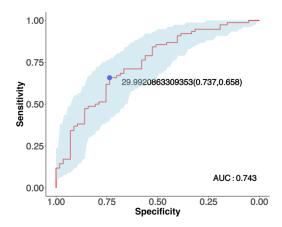
Low	76 (80.9%)
High	18 (19.1%)
Survival-no. (%)	
Alive	57 (60.6%)
Dead	37 (39.4%)

Supplementary Table 2 The correlation between the tissue CNR and clinicopathological factors.

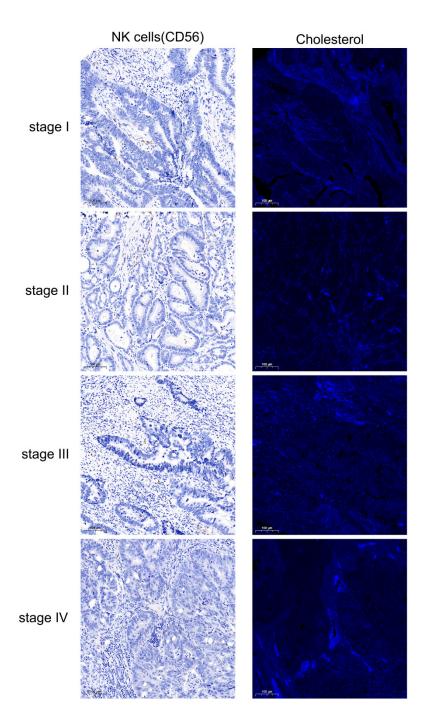
	Patients (n=94)		
Characteristics	CNR-low (n=54)	CNR-high (n=40)	P value
Gender-no. (%)			
Male	23 (42.6%)	25 (62.5%)	0.064
Female	31 (57.4%)	15 (37.5%)	
Age (mean, y)	64.43	64.40	0.990
Tumor size-no. (%)			
<5	20 (37.0%)	15 (37.5%)	0.999
≥5	34 (63.0%)	25 (62.5%)	
TNM stage-no. (%)			
I-II	34 (63.0%)	17 (42.5%)	0.061
III-IV	20 (37.0%)	23 (57.5%)	
Tumor location-no. (%)			
Left colon	22 (40.7%)	20 (50.0%)	0.407
Right colon	32 (59.3%)	20 (50.0%)	
Histological type-no. (%)			
Adenocarcinoma	53 (98.1%)	40 (100.0%)	0.999
Others	1 (1.9%)	0 (0.0%)	
Survival-no. (%)			
Alive	40 (74.1%)	17 (42.5%)	0.003
Dead	14 (25.9%)	23 (57.5%)	
OS (mean, m)	74.47	58.7	0.031



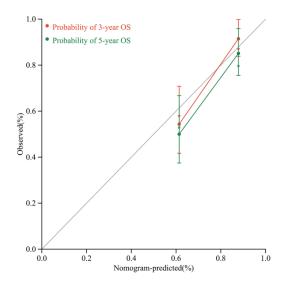
**Supplementary Fig. S1.** Differences in blood lymphocyte ratios. (A) Differences in lymphocyte ratios between high- and low-triglyceride (blood) patients with CRC. (B) Differences in lymphocyte ratios between high- and low-LDL-C (blood) patients with CRC. Data are expressed as the mean  $\pm$  SEM. Statistical significance was determined by unpaired Student's t test.



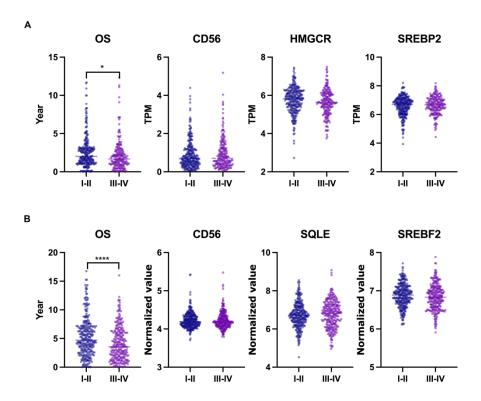
Supplementary Fig. S2. The optimal blood CNR cut-off point.



**Supplementary Fig. S3.** The NK cells (tissue, immunohistochemical staining) and cholesterol (tissue, immunofluorescence staining) expression profiles of different TNM stages (100× magnifications).



**Supplementary Fig. S4.** Calibration curves of the prognostic nomogram for predicting 3-year (red) and 5-year (green) OS in patients with CRC. The Y-axis represents the actual OS; the X-axis represents the nomogram-predicted OS.



**Supplementary Fig. S5.** Gene expression of cholesterol synthesis and NK cells in colon cancer datasets. (A) Compared to TNM stage I-II, CD56, HMGCR, and SREBP2 gene expression was unchanged in the TNM stage III-IV group (TCGA). (B) Compared to TNM stage I-II, CD56, SQLE, and SREBP2 gene expression was unchanged in the TNM stage III-IV group (GSE39582). Statistical significance was determined by unpaired Student's t test. \*, P < .05; \*\*\*\*, P < .0001.