

**Table S1** Correlation of prognostic factors with immune cell enrichment score in CRC patients with ssGSEA algorithm

Immune cells	NPC1L1	GLP2R	SLC8A3	AMBP	SMCO2	TTC16
aDC	-0.101	-0.009	0.236	-0.210	0.156	-0.065
B cells	-0.055	0.278	0.248	-0.152	-0.012	-0.005
CD8 T cells	-0.018	-0.066	0.121	-0.195	0.169	-0.048
Cytotoxic cells	-0.109	-0.048	0.254	-0.275	0.198	-0.038
DC	-0.057	0.225	0.372	-0.169	0.038	-0.006
Eosinophils	0.075	0.380	0.253	-0.039	-0.151	-0.027
iDC	0.030	0.289	0.349	-0.114	0.056	0.004
Macrophages	-0.078	0.074	0.439	-0.196	0.239	0.062
Mast cells	-0.026	0.383	0.412	-0.135	0.046	-0.017
Neutrophils	-0.094	0.114	0.369	-0.144	0.083	-0.052
NK CD56bright cells	0.081	-0.104	-0.014	-0.040	0.039	-0.041
NK CD56dim cells	-0.056	-0.029	0.131	-0.073	0.008	-0.086
NK cells	0.060	0.114	0.324	-0.085	0.050	0.048
pDC	-0.118	0.152	0.209	-0.050	-0.094	0.115
T cells	-0.107	0.064	0.281	-0.236	0.146	0.008
T helper cells	-0.113	0.065	0.211	-0.150	0.233	0.069
Tcm	-0.039	0.075	0.198	-0.102	0.173	0.113
Tem	0.009	0.164	0.375	-0.114	0.141	-0.009
TFH	0.026	0.175	0.303	-0.129	0.102	-0.072
Tgd	-0.075	0.166	0.191	-0.093	0.061	-0.050
Th1 cells	-0.118	-0.006	0.337	-0.237	0.240	-0.010
Th17 cells	-0.118	0.050	-0.108	0.086	-0.183	0.011
Th2 cells	0.006	-0.133	0.026	-0.121	0.251	-0.144
TReg	-0.063	0.135	0.281	-0.170	0.009	-0.024

CRC, colorectal cancer; ssGSEA, single-sample gene set enrichment analysis; aDC, activated dendritic cell; DC, dendritic cell; iDC, immature dendritic cell; NK, natural killer; pDC, plasmacytoid dendritic cell; Tcm, T central memory; Tem, T effector memory; TFH, T follicular helper; Tgd, T gamma delta; *NPC1L1*, Niemann-Pick C1-like 1; *GLP2R*, glucagon-like peptide 2 receptor; *SLC8A3*, solute carrier family 8 member A3; *AMBP*, alpha-1-microglobulin/bikunin precursor; *SMCO2*, single-pass membrane protein with coiled-coil domains 2; *TTC16*, tetratricopeptide repeat domain 16.

**Table S2** Correlation of prognostic factors with Immune cell enrichment score in CRC patients with ESTIMATE algorithm

Immune score	NPC1L1	GLP2R	SLC8A3	AMBP	SMCO2	TTC16
StromalScore	-0.053	0.254	0.500	-0.175	0.152	0.073
ImmuneScore	-0.131	0.090	0.406	-0.263	0.192	0.031
ESTIMATEScore	-0.097	0.186	0.485	-0.235	0.187	0.057

CRC, colorectal cancer; *NPC1L1*, Niemann-Pick C1-like 1; *GLP2R*, glucagon-like peptide 2 receptor; *SLC8A3*, solute carrier family 8 member A3; *AMBP*, alpha-1-microglobulin/bikunin precursor; *SMCO2*, single-pass membrane protein with coiled-coil domains 2; *TTC16*, tetratricopeptide repeat domain 16.

**Table S3** Correlation of prognostic factors with Immune cell enrichment score in CRC patients with CIBERSORT algorithm

Immune cells	NPC1L1	GLP2R	SLC8A3	AMBP	SMCO2	TTC16
B cells naive	0.003	0.140	0.141	-0.001	0.035	-0.015
B cells memory	0.028	-0.028	-0.090	0.029	-0.117	0.073
Plasma cells	0.063	0.124	-0.060	-0.006	-0.114	-0.015
T cells CD8	0.006	-0.176	-0.030	-0.116	0.028	-0.010
T cells CD4 naive	0.019	-0.052	0.037	0.009	0.011	-0.043
T cells CD4 memory resting	0.030	0.265	-0.043	-0.017	-0.042	-0.067
T cells CD4 memory activated	-0.054	-0.098	-0.038	0.014	0.007	-0.030
T cells follicular helper	-0.048	-0.098	-0.053	-0.050	0.048	0.039
T cells regulatory Tregs	0.060	0.095	-0.022	0.043	-0.128	0.074
T cells gamma delta	-0.050	-0.058	-0.031	-0.011	0.065	-0.070
NK cells resting	0.002	-0.048	0.021	-0.041	-0.003	0.015
NK cells activated	-0.048	-0.166	-0.112	0.011	0.135	-0.005
Monocytes	0.081	0.001	-0.117	0.021	-0.026	0.007
Macrophages M0	0.039	-0.037	0.098	0.144	-0.073	-0.010
Macrophages M1	-0.108	-0.095	0.092	-0.122	0.140	0.009
Macrophages M2	-0.024	0.232	0.143	-0.080	0.044	0.040
Dendritic cells resting	0.015	0.115	-0.044	0.030	-0.075	0.058
Dendritic cells activated	-0.030	0.050	0.004	-0.085	-0.011	-0.032
Mast cells resting	0.011	0.182	0.134	-0.069	0.085	0.024
Mast cells activated	0.022	-0.142	-0.090	0.041	-0.042	-0.045
Eosinophils	-0.003	0.077	-0.038	-0.082	-0.044	0.007
Neutrophils	-0.087	0.002	0.208	-0.073	0.119	0.016

CRC, colorectal cancer; *NPC1L1*, Niemann-Pick C1-like 1; *GLP2R*, glucagon-like peptide 2 receptor; *SLC8A3*, solute carrier family 8 member A3; *AMBP*, alpha-1-microglobulin/bikunin precursor; *SMCO2*, single-pass membrane protein with coiled-coil domains 2; *TTC16*, tetratricopeptide repeat domain 16; NK, natural killer.