

Supplementary Material

1. Figure

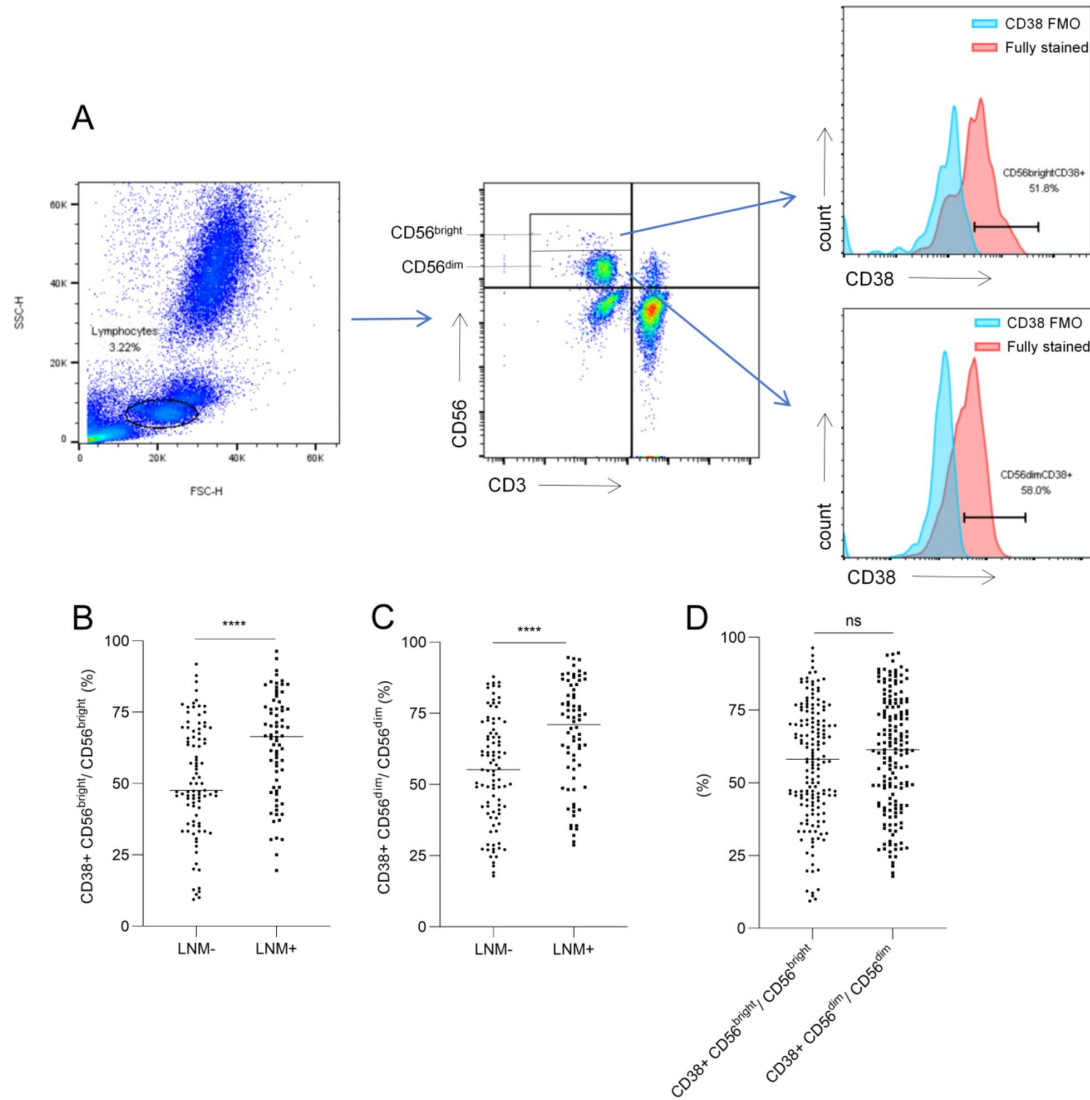


Figure S1. The proportions of NK cell subtype in CRC patients. **(A)** Flow cytometry plot showed the gating strategy for CD56^{bright} NK cells, CD56^{dim} NK cells, CD38⁺ CD56^{bright} NK cells and CD38⁺ CD56^{dim} NK cells. **(B)** The proportions of CD38⁺ CD56^{bright} NK cells to CD56^{bright} NK cells according to LNM; **(C)** The proportions of CD38⁺ CD56^{dim} NK cells to CD56^{dim} NK cells according to LNM; **(D)** The proportion of CD38 frequencies in CD56^{bright} and CD56^{dim} fractions. CRC, colorectal cancer; LNM, lymph node metastasis; CD38 FMO: CD38 fluorescence-minus-one; LNM+: patients with lymph node metastasis; LNM-: patients without lymph node metastasis. ns: not significant, ****: $p \leq 0.0001$.

2. Table

Table S1. The relationship between lymph node metastasis and clinicopathological factors in colon cancer and rectal cancer.

	Colon, n(%)			<i>p</i>	Rectum, n(%)			<i>p</i>
	Total	LNM+	LNM-		Total	LNM+	LNM-	
Total	81 (100.00)	31 (38.27)	50 (61.73)		84 (100.00)	41 (48.81)	43 (51.19)	
Gender				0.54				0.07
female	28 (34.57)	12 (14.81)	16 (19.75)		17 (20.24)	5 (5.95)	12 (14.29)	
male	53 (65.43)	19 (23.46)	34 (41.98)		67 (79.76)	36 (42.86)	31 (36.90)	
Age				0.14				0.26
≤60	36 (44.44)	17 (20.99)	19 (23.46)		22 (26.19)	13 (15.48)	9 (10.71)	
>60	45 (55.56)	14 (17.28)	31 (38.27)		62 (73.81)	28 (33.33)	34 (40.48)	
BMI				0.31				0.28
≤28	69 (85.19)	28 (34.57)	41 (50.62)		80 (95.24)	38 (45.24)	42 (50.00)	
>28	12(14.81)	3 (3.70)	9 (11.11)		4 (4.76)	3 (3.57)	1 (1.19)	
Ulcer				0.78				0.21
no	17 (20.99)	6 (7.41)	11 (13.58)		17 (20.24)	6 (7.14)	11 (13.10)	
yes	64 (79.01)	25 (30.86)	39 (48.15)		67 (79.76)	35 (41.67)	32 (38.10)	
Tumor size				0.04				0.02
<3cm	14 (17.28)	2 (2.47)	12 (14.81)		17 (20.24)	4 (4.76)	13 (15.48)	
≥3cm	67 (82.72)	29 (35.80)	38 (46.91)		67 (79.76)	37 (44.05)	30 (35.71)	
Histologic grade				0.03				0.02
G1	69 (85.19)	23 (28.40)	46 (56.79)		76 (90.48)	34 (40.48)	42 (50.00)	
G2	12 (14.81)	8 (9.88)	4 (4.94)		8 (9.52)	7 (8.33)	1 (1.19)	
Depth of invasion				0.04				<0.01
T1-T2	10 (12.35)	1 (1.23)	9 (11.11)		26 (30.95)	6 (7.14)	20 (23.81)	
T3-T4	71 (87.65)	30 (37.04)	41 (50.62)		58 (69.05)	35 (41.67)	23 (27.38)	
LVI				<0.01				<0.01
yes	18 (22.22)	16 (19.75)	2 (2.47)		12 (14.29)	12 (14.29)	0 (0.00)	
no	63 (77.78)	15 (18.52)	48 (59.26)		72 (85.71)	29 (34.52)	43 (51.19)	
Perineural invasion				0.04				0.04
yes	21 (25.93)	12 (14.81)	9 (11.11)		32 (38.10)	20 (23.81)	12 (14.29)	
no	60 (74.07)	19 (23.46)	41 (50.62)		52 (61.90)	21 (25.00)	31 (36.90)	
CEA (ng/ml)				0.03				<0.01
≥ 5	30 (37.04)	16 (19.75)	14 (17.28)		18 (21.43)	11 (13.10)	7 (8.33)	
< 5	51 (62.96)	15 (18.52)	36 (44.44)		66 (78.57)	30 (35.71)	36 (42.86)	
neoadjuvant therapy				0.26				0.03
yes	2 (2.47)	0 (0.00)	2 (2.47)		8 (9.52)	1 (1.19)	7 (8.33)	
no	79 (97.53)	31 (38.27)	48 (59.26)		76 (90.48)	40 (47.62)	36 (42.86)	
CD38+ NK cells				0.02				<0.01
low (<cutoff)	59 (72.84)	18 (22.22)	41 (50.62)		56 (66.67)	19 (22.62)	37 (44.05)	
high (≥cutoff)	22 (27.16)	13 (16.05)	9 (11.11)		28 (33.33)	22 (26.19)	6 (7.14)	

LNM, lymph node metastasis; CRC, colorectal cancer; Histologic grade: G1, well or moderately differentiated adenocarcinomas; G2, poorly differentiated adenocarcinomas or signet ring cell type or mucinous carcinomas; LVI, lymphovascular invasion.