

## Supplementary material

**Aro et al: Sarcopenia and myosteatorsis are associated with neutrophil to lymphocyte ratio but not Glasgow Prognostic score in colorectal cancer patients**

**Table S1.** Relationships between two-tiered sarcopenia and myosteatosi s and systemic inflammatory markers.

[illegible]

		Myost	Sarco	CRP	Alb	NLR	Hb	IL1R1	IL4	IL6	IL7	IL8	IL9	IL12p70	IFNg	CXCL10	CCL2	CCL4	Eotaxin	PDGFBb
IL4	r	-0,142	-0,022	0,099	-0,126	<b>,231*</b>	-0,110	<b>,685**</b>	1,000	<b>,564**</b>	<b>,752**</b>	<b>,532**</b>	<b>,656**</b>	<b>,425**</b>	<b>,816**</b>	0,183	0,128	<b>,399**</b>	0,180	<b>,609**</b>
	P value	0,185	0,837	0,357	0,238	0,029	0,306	0,000		0,000	0,000	0,000	0,000	0,000	0,000	0,086	0,233	0,000	0,091	0,000
	N	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89
IL6	r	-0,013	-0,104	<b>,544**</b>	<b>-,351**</b>	<b>,327**</b>	<b>-,286**</b>	<b>,589**</b>	<b>,564**</b>	1,000	<b>,569**</b>	<b>,692**</b>	<b>,489**</b>	<b>,407**</b>	<b>,634**</b>	<b>,354**</b>	<b>,311**</b>	<b>,348**</b>	0,151	<b>,251*</b>
	P value	0,904	0,333	0,000	0,001	0,002	0,007	0,000	0,000		0,000	0,000	0,000	0,000	0,000	0,001	0,003	0,001	0,159	0,018
	N	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89
IL7	r	-0,107	-0,084	<b>,318**</b>	-0,179	<b>,313**</b>	-0,141	<b>,745**</b>	<b>,752**</b>	<b>,569**</b>	1,000	<b>,590**</b>	<b>,564**</b>	<b>,539**</b>	<b>,662**</b>	<b>,234*</b>	<b>,218*</b>	<b>,461**</b>	0,011	<b>,648**</b>
	P value	0,319	0,432	0,002	0,094	0,003	0,186	0,000	0,000	0,000		0,000	0,000	0,000	0,000	0,028	0,040	0,000	0,919	0,000
	N	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89
IL8	r	-0,036	-0,087	<b>,391**</b>	<b>-,327**</b>	<b>,214*</b>	<b>-,341**</b>	<b>,582**</b>	<b>,532**</b>	<b>,692**</b>	<b>,590**</b>	1,000	<b>,439**</b>	<b>,410**</b>	<b>,507**</b>	<b>,310**</b>	<b>,392**</b>	<b>,412**</b>	0,116	<b>,291**</b>
	P value	0,738	0,418	0,000	0,002	0,044	0,001	0,000	0,000	0,000	0,000		0,000	0,000	0,000	0,003	0,000	0,000	0,280	0,006
	N	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89
IL9	r	<b>-,231*</b>	-0,140	0,153	-0,052	0,162	-0,040	<b>,624**</b>	<b>,656**</b>	<b>,489**</b>	<b>,564**</b>	<b>,439**</b>	1,000	<b>,550**</b>	<b>,695**</b>	<b>,214*</b>	<b>,210*</b>	<b>,375**</b>	0,138	<b>,434**</b>
	P value	0,030	0,190	0,154	0,627	0,130	0,713	0,000	0,000	0,000	0,000	0,000		0,000	0,000	0,044	0,049	0,000	0,196	0,000
	N	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89
IL12p70	r	-0,074	0,002	<b>,231*</b>	-0,136	<b>,243*</b>	-0,114	<b>,528**</b>	<b>,425**</b>	<b>,407**</b>	<b>,539**</b>	<b>,410**</b>	<b>,550**</b>	1,000	<b>,460**</b>	<b>,295**</b>	0,129	<b>,283**</b>	0,090	<b>,247*</b>
	P value	0,491	0,987	0,030	0,204	0,022	0,286	0,000	0,000	0,000	0,000	0,000	0,000		0,000	0,005	0,227	0,007	0,401	0,020
	N	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89
IFNg	r	-0,183	-0,169	0,147	-0,112	0,093	-0,108	<b>,682**</b>	<b>,816**</b>	<b>,634**</b>	<b>,662**</b>	<b>,507**</b>	<b>,695**</b>	<b>,460**</b>	1,000	<b>,263*</b>	0,129	<b>,413**</b>	<b>,272*</b>	<b>,417**</b>
	P value	0,086	0,112	0,169	0,296	0,387	0,314	0,000	0,000	0,000	0,000	0,000	0,000	0,000		0,013	0,227	0,000	0,010	0,000
	N	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89
CXCL10	r	0,097	0,032	<b>,306**</b>	-0,069	0,125	<b>-,226*</b>	<b>,309**</b>	0,183	<b>,354**</b>	<b>,234*</b>	<b>,310**</b>	<b>,214*</b>	<b>,295**</b>	<b>,263*</b>	1,000	0,113	<b>,322**</b>	0,055	0,153
	P value	0,366	0,766	0,004	0,520	0,243	0,033	0,003	0,086	0,001	0,028	0,003	0,044	0,005	0,013		0,294	0,002	0,609	0,154
	N	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89
CCL2	r	-0,066	0,030	0,115	-0,172	0,102	-0,094	0,161	0,128	<b>,311**</b>	<b>,218*</b>	<b>,392**</b>	<b>,210*</b>	0,129	0,129	0,113	1,000	0,088	<b>,417**</b>	0,194
	P value	0,539	0,779	0,281	0,106	0,343	0,382	0,132	0,233	0,003	0,040	0,000	0,049	0,227	0,227	0,294		0,412	0,000	0,069
	N	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89
CCL4	r	0,129	-0,006	<b>,259*</b>	-0,106	<b>,286**</b>	-0,197	<b>,593**</b>	<b>,399**</b>	<b>,348**</b>	<b>,461**</b>	<b>,412**</b>	<b>,375**</b>	<b>,283**</b>	<b>,413**</b>	<b>,322**</b>	0,088	1,000	-0,005	<b>,379**</b>
	P value	0,227	0,957	0,014	0,325	0,007	0,064	0,000	0,000	0,001	0,000	0,000	0,000	0,007	0,000	0,002	0,412		0,963	0,000
	N	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89

		Myost	Sarco	CRP	Alb	NLR	Hb	IL1R1	IL4	IL6	IL7	IL8	IL9	IL12p 70	IFNg	CXCL 10	CCL2	CCL4	Eotaxin	PDGFb b
Eotaxin	r	-0,100	-0,143	-0,113	-0,069	-0,030	-0,027	0,033	0,180	0,151	0,011	0,116	0,138	0,090	<b>,272*</b>	0,055	<b>,417**</b>	-0,005	1,000	-0,073
	P value	0,352	0,180	0,291	0,520	0,779	0,802	0,762	0,091	0,159	0,919	0,280	0,196	0,401	0,010	0,609	0,000	0,963		0,498
	N	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89
PDGFb	r	0,005	-0,037	0,084	-0,007	<b>,211*</b>	-0,052	<b>,586**</b>	<b>,609**</b>	<b>,251*</b>	<b>,648**</b>	<b>,291**</b>	<b>,434**</b>	<b>,247*</b>	<b>,417**</b>	0,153	0,194	<b>,379**</b>	-0,073	1,000
	P value	0,963	0,729	0,433	0,948	0,047	0,626	0,000	0,000	0,018	0,000	0,006	0,000	0,020	0,000	0,154	0,069	0,000	0,498	
	N	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89

Abbreviations: Myost: myosteatorsis; r: Spearman's correlation coefficient; Sarc: Sarcopenia.

\*\*.. Correlation is significant at the 0.01 level

\*. Correlation is significant at the 0.05 level

**Table S2.** Relationships between the combined sarcopenia-myosteatorsis variable and survival.

	DFS			CSS			OS		
	HR	95%CI	p value	HR	95%CI	p value	HR	95%CI	p value
Age (<70 vs. ≥70)	0.96	0.50-1.86	0.904	2.5	1.33-4.71	<b>0.004</b>	2.70	1.57-4.65	<b>&lt;0.001</b>
Tumor invasion (T1-T2 vs T3-T4)	0.72	0.33-1.58	0.413	0.68	0.55-2.49	0.678	1.22	0.68-2.21	0.507
Nodal metastases (N0 vs. N1-N2)	8.85	3.86-20.3	<b>&lt;0.001</b>	6.62	2.84-15.4	<b>&lt;0.001</b>	2.74	1.60-4.69	<b>&lt;0.001</b>
Distant metastases (M0 vs. M1)	2.90	0.32-26.53	0.346	7.93	4.15-15.2	<b>&lt;0.001</b>	5.41	3.09-9.47	<b>&lt;0.001</b>
Sarcopenia alone <sup>1</sup>	2.51	1.10-5.75	<b>0.029</b>	1.27	0.62-2.58	0.515	1.12	0.60-2.07	0.730
Myosteatorsis alone <sup>1</sup>	4.88	1.44-16.5	<b>0.011</b>	2.15	0.89-5.18	0.089	2.07	0.96-4.50	0.065
Both sarcopenia and myosteatorsis <sup>1</sup>	1.32	0.44-3.86	0.617	1.12	0.49-2.55	0.797	1.49	0.78-2.86	0.230

<sup>1</sup> Compared with patients without sarcopenia or myosteatorsis

**Table S3.** Distribution of clinocopathological factors in myosteatosi and sarcopenia patient groups in stage I-III colorectal cancer.

Factors	Neither sarcopenia nor myosteatosi (n=79)	Sarcopenia only, no myosteatosi (n=76)	Myosteatosi only, no sarcopenia (n=20)	Both sarcopenia and myosteatosi (n=47)	p-value
<b>Age, mean, years, (<math>\pm</math> SD)</b>	66 ( $\pm$ 10.8)	72 ( $\pm$ 9.6)	73 ( $\pm$ 10.0)	77 ( $\pm$ 9.3)	<b>&lt;0.001</b>
<b>Age</b>					
$\leq$ 70 years (n=76)	43 (62.3%)	21 (31.8%)	4 (26.7%)	8 (20.0%)	<b>&lt;0.001</b>
>70 years (n=114)	26 (37.7%)	45 (68.2%)	11 (73.3%)	32 (80.0%)	
<b>Gender</b>					
Male (n=101)	42 (60.9%)	36 (54.5%)	6 (40.0%)	17 (42.5%)	0.212
Female (n=89)	27 (39.1%)	30 (45.5%)	9 (60.0%)	23 (57.3%)	
<b>BMI, kg/m<sup>2</sup></b>					
<18.5 (n=2)	1 (1.4%)	1 (1.5%)	0 (0.0%)	0 (0.0%)	<b>&lt;0.001</b>
18.5-24.9 (n=58)	22 (31.9%)	12 (18.2%)	3 (20.0%)	21 (52.5%)	
25-29.9 (n=79)	19 (27.5%)	43 (65.2%)	6 (40.0%)	11 (27.5%)	
>30 (n=51)	27 (39.1%)	10 (15.2%)	6 (40.0%)	8 (20.0%)	
<b>Tumor location</b>					
Proximal colon (n=78)	25 (36.2%)	21 (31.8%)	10 (66.7%)	22 (55.0%)	<b>0.021</b>
Distal colon (n=50)	15 (21.7%)	23 (34.8%)	4 (26.7%)	8 (20.0%)	
rectum (n=62)	29 (42.0%)	22 (33.3%)	1 (6.7%)	10 (25.0%)	
<b>WHO grade</b>					
Grade 1 (n=55)	20 (29.0%)	16 (24.2%)	5 (33.3%)	14 (35.0%)	0.235
Grade 2 (n=115)	45 (65.2%)	41 (62.1%)	10 (66.7%)	19 (47.5%)	
Grade 3 (n=20)	4 (5.8%)	9 (13.6%)	0 (0.0%)	7 (17.5%)	
<b>TNM stage</b>					
1 (n=42)	18 (26.1%)	8 (12.1%)	5 (33.3%)	11 (27.5%)	0.283
2 (n=75)	27 (39.1%)	27 (40.9%)	5 (33.3%)	16 (40.0%)	
3 (n=73)	24 (34.8%)	31 (47.0%)	5 (33.3%)	13 (32.5%)	
4 (n=0)					

Depth of invasion					
T1 (n=13)	7 (10.1%)	3 (4.5%)	1 (6.7%)	2 (5.0%)	0.383
T2 (n=43)	15 (21.7%)	9 (13.6%)	5 (33.3%)	11 (27.5%)	
T3 (n=152)	45 (62.5%)	52 (78.8%)	9 (60.0%)	24 (60.0%)	
T4 (n=14)	2 (2.9%)	2 (3.0%)	0 (0.0%)	3 (7.5%)	
Nodal metastases					
N0 (n=117)	45 (65.2%)	35 (53.0%)	10 (66.7%)	27 (67.5%)	0.052
N1 (n=53)	16 (23.2%)	24 (36.4%)	1 (6.7%)	12 (30.0%)	
N2 (n=20)	8 (11.6%)	7 (10.6%)	4 (26.7%)	1 (2.5%)	
Serrated morphology					
yes (n=56)	15 (21.7%)	14 (21.2%)	6 (40.0%)	21 (52.5%)	0.002
no (n=134)	54 (78.3%)	52 (78.8%)	9 (60.0%)	19 (47.5%)	
ASA grade					
I (n=12)	6 (9.0%)	4 (6.2%)	1 (7.7%)	1 (2.8%)	<0.001
II (n=78)	39 (58.2%)	30 (46.2%)	1 (7.7%)	8 (22.2%)	
III (n=74)	16 (23.9%)	27 (41.5%)	9 (69.3%)	22 (61.1%)	
IV (n=17)	6 (9.0%)	4 (6.2%)	2 (15.4%)	5 (13.9%)	
Diabetes					
No (n=154)	56 (81.2%)	58 (87.9%)	10 (66.7%)	30 (75.0%)	0.158
Yes (n=36)	13 (18.8%)	8 (12.1%)	5 (33.3%)	10 (25.0%)	
Coronary Artery disease					
No (n=149)	58 (84.1%)	54 (81.8%)	8 (53.3%)	29 (72.5%)	0.052
Yes (n=41)	11 (15.9%)	12 (18.2%)	7 (46.7%)	11 (27.5%)	
Use of blood pressure lowering medication					
No (n=76)	35 (50.7%)	27 (40.9%)	2 (13.3%)	12 (30.0%)	0.023
Yes (n=114)	34 (49.3)	39 (59.1%)	13 (86.7%)	28 (70.0%)	
Use of cholesterol lowering medication					
No (n=119)	44 (63.8%)	40 (60.%)	6 (40.0%)	29 (72.5%)	0.165
Yes (n=71)	25 (36.2%)	26 (39.4%)	9 (60.0%)	11 (27.5%)	
CRP, mg/L					

≤10 (n=160)	57 (82.6%)	55 (83.3%)	15 (100.0%)	33 (82.5%)	0.370
>10 (n=30)	12 (17.4%)	11 (16.7%)	0 (0.0%)	7 (17.5%)	
Modified Glasgow Prognostic Score					
0 (n=161)	57 (82.6%)	56 (84.8%)	15 (100.0%)	33 (82.5%)	0.335
1 (n=28)	12 (17.4%)	10 (15.2%)	0 (0.0%)	6 (15.0%)	
2 (n=1)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (2.5%)	
NLR					
≤3 (n=143)	60 (88.2%)	45 (69.2%)	13 (86.7%)	25 (62.5%)	0.006
>3 (n=45)	8 (11.8%)	20 (30.8%)	2 (13.3%)	15 (37.5%)	
Albumin, g/L					
≤35 (n= 5)	0 (0.0%)	1 (1.5%)	1 (6.7%)	3 (7.5%)	0.037
>35 (185)	69 (100.0%)	65 (98.5%)	14 (93.3%)	37 (92.5%)	
BRAF VE1 immunohistochemistry					
Negative (n=165)	62 (89.9%)	61 (92.4%)	11 (73.3%)	31 (77.5%)	0.045
Positive (n=25)	7 (10.1%)	5 (7.6%)	4 (26.7%)	9 (22.5%)	

Abbreviations: BMI: body mass index; ASA: American Society of Anesthesiologists; CRP: C-reactive protein; NLR: Neutrophil-Lymphocyte Ratio

**Table S4.** Serum cytokine and chemokine levels, blood cell counts and other laboratory parameters in relation to sarcopenia and myosteatosi in stage I-III colorectal cancer.

Factors	Neither sarcopenia nor myosteatosi (N=79)	Sarcopenia only, no myosteatosi (N=76)	Myosteatosi only, no sarcoipenia (N=20)	Both sarcopenia and myosteatosi (N=47)	p-value
<b>Laboratory parameters, median (IQR)</b>					
Serum CRP, mg/L	2.00 (0.70-7.51)	1.90 (0.76-6.64)	1.69 (0.60-5.76)	3.24 (1.00-6.26)	0.673
Serum Albumin, g/L	44.00 (41.00-45.75)	43.0 (41.00-45.00)	43.0 (40.00-46.00)	42.0 (38.25-45.00)	0.301
Blood leukocytes <sup>1</sup>	6.70 (5.60-7.98)	6.50 (5.20-7.75)	8.10 (6.40-8.70)	6.85 (5.65-7.80)	0.169
Blood neutrophils <sup>1</sup>	3.80 (2.83-5.00)	3.90 (2.80-4.90)	4.80 (3.90-5.80)	4.05 (3.03-5.28)	0.293
Blood lymphocytes <sup>1</sup>	1.90 (1.50-2.40)	1.70 (1.30-2.05)	2.30 (1.70-2.80)	1.80 (1.20-2.30)	<b>0.034</b>
Blood NLR	2.05 (1.46-2.54)	2.21 (1.50-3.28)	2.08 (1.64-2.68)	2.54 (1.63-3.40)	<b>0.048</b>
Blood monocytes <sup>1</sup>	0.60 (0.44-0.70)	0.55 (0.40-0.70)	0.70 (0.60-0.80)	0.60 (0.50-0.80)	<b>0.022</b>
Haemoglobin, g/L	131.0 (116.0-142.3)	129.5 (111.8-140.0)	122.0 (109.0-138.0)	121.0 (109.0-129.0)	<b>0.010</b>
CEA, µg/L	1.45 (0.95-3.43)	1.60 (0.95-4.38)	1.60 (1.00-4.10)	2.20 (1.30-5.00)	0.231
<b>Cytokines, pg/ml, median (IQR)</b>					
IL-1R1	75.63 (45.83-98.78)	47.94 (33.74-68.39)	46.59 (29.91-98.62)	40.14 (29.39-93.32)	0.321
IL-4	0.95 (0.75-1.14)	0.82 (0.63-1.06)	0.78 (0.56-0.84)	0.86 (0.59-0.93)	0.315
IL-6	5.82 (3.65-8.44)	4.33 (3.06-6.07)	4.58 (3.13-6.59)	4.31 (2.83-10.38)	0.434
IL-7	5.95 (4.04-8.26)	4.97 (3.44-6.54)	5.01 (4.31-6.55)	4.46 (3.24-6.73)	0.353
CXCL8	12.54 (10.30-16.93)	9.22 (8.41-13.58)	11.50 (9.20-12.59)	10.18 (8.44-18.49)	0.278

IL-9	11.11 (6.51-16.64)	7.35 (4.84-11.39)	6.88 (2.94-13.07)	4.73 (3.35-8.44)	<b>0.037</b>
IL-12	31.00 (21.10-44.72)	29.75 (11.44-42.39)	31.72 (11.52-37.69)	26.31 (7.87-34.77)	0.719
IFNg	39.43 (31.09-47.84)	27.26 (19.11-38.24)	25.28 (19.61-36.49)	26.53 (19.74-35.16)	0.027
CXCL10	845 (641-1110)	899 (5623-1132)	1068 (651-1706)	877 (697-1354)	0.753
CCL2	13.98 (10.44-19.35)	15.17 (10.56-24.02)	17.51 (12.22-23.56)	11.65 (4.47-21.57)	0.493
CCL4	66.73 (48.74-83.75)	55.11 (47.13-63.49)	58.56 (42.10-101.15)	67.55 (46.17-88.48)	0.395
CCL11	132 (114-183)	123 (92-171)	154 (84-180)	121 (87-171)	0.597
PDGF-BB	9279 (5803-4823)	7678 (5203-10059)	8935 (5105-12863)	7895 (3056-12498)	0.788

Abbreviations: CRP: C-reactive protein; NLR: Neutrophil-Lymphocyte Ratio; CEA: carcinoembryonic antigen; <sup>1</sup>: x 10<sup>9</sup>/L;

**Table S5.** Multivariable regression model for myosteatorsis probability in stage I-III colorectal cancer.

<b>Factors</b>	<b>OR</b>	<b>95%CI</b>	<b>p-value</b>
Age (<70 vs. ≥70 years)	1.68	0.68–4.19	0.265
Tumor location (proximal vs. distal colon)	0.491	0.18–1.33	0.162
Tumor location (proximal colon vs. rectum)	0.498	0.20–1.24	0.134
Serrated morphology (yes vs. no)	3.54	1.56–8.00	<b>0.002</b>
ASA grade (I-II vs. III-IV)	4.42	1.70–11.47	<b>0.002</b>
NLR (<3 vs. >3)	1.13	0.47–2.69	0.784
Albumin level (<35 g/L vs. >35 g/L)	0.22	0.02-2.41	0.215
Blood pressure lowering medication (yes/no)	0.92	0.37-2.33	0.868

Abbreviations: OR: odds ratio; CI: confidence interval; ASA: American Society of Anesthesiologists; BMI: CEA: carcinoembryonic antigen; NLR: Neutrophil-Lymphocyte Ratio.



**Table S6.** Multivariable regression model for sarcopenia probability in stage I-III colorectal cancer.

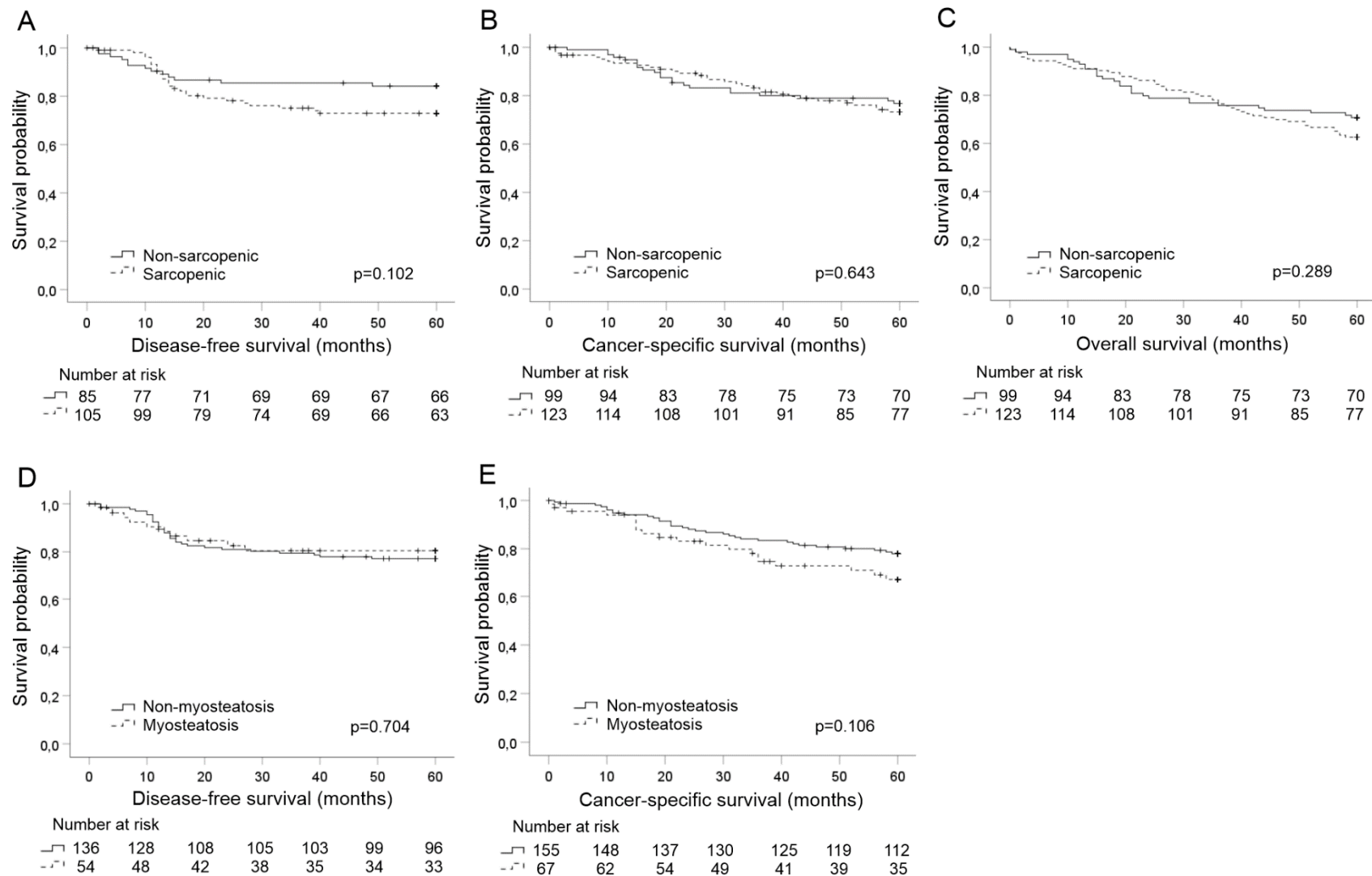
Factors	OR	95%CI	p-value
Age (<70 vs. ≥70 years)	3.92	1.87–8.23	<0.001
Tumor location (proximal vs. distal colon)	2.09	0.87–4.99	0.099
Tumor location (proximal colon vs. rectum)	1.37	0.62–3.02	0.430
Serrated morphology (yes vs. no)	1.33	0.63–2.81	0.456
ASA grade (I-II vs. III-IV)	1.22	0.55–2.69	0.624
NLR (<3 vs. ≥3)	3.17	1.38–7.28	0.007
Albumin level (<35 g/L vs. ≥35 g/L)	0.63	0.06–6.52	0.701
Blood pressure lowering medication (yes/no)	1.15	0.53–2.47	0.729

Abbreviations: OR: odds ratio; CI: confidence interval; ASA: American Society of Anesthesiologists; BMI: CEA: carcinoembryonic antigen; NLR: Neutrophil-Lymphocyte Ratio.

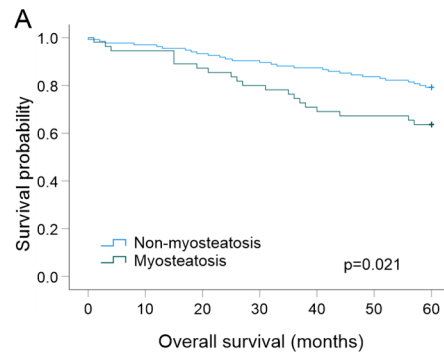
**Table S7.** Multivariable Cox regression model for overall survival in stage I-III colorectal cancer.

Factors	HR	95%CI	p-value
Age (<70 vs. ≥70)	2.49	1.25–4.96	0.009
Tumor invasion (T1-T2 vs. T3-T4)	1.08	0.56–2.09	0.822
Nodal metastases (N0 vs. N1-N2)	3.05	1.68–5.55	<0.001
Myosteatosis (No vs. Yes)	1.81	1.00–3.26	0.048

HR: hazard ratio; CI: confidence interval. Median follow-up time 60 months; 48 (25.3%) events.

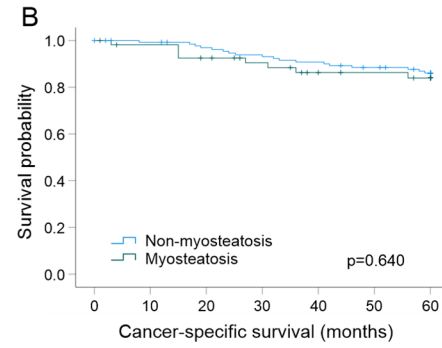


**Supplementary Figure S1.** Kaplan-Meier survival curves for (A) sarcopenia and disease-free survival, (B) sarcopenia and cancer-specific survival, (C) sarcopenia and overall survival, (D) myosteatoses and disease-free survival, and (E) myosteatoses and cancer-specific survival.



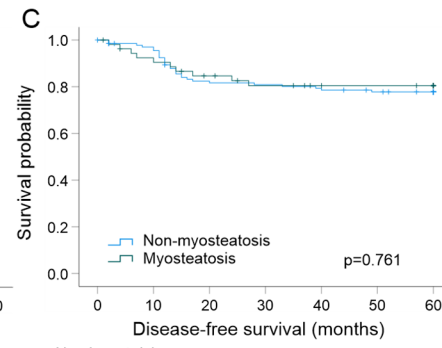
Number at risk

135	131	126	122	118	113	107
55	52	48	44	39	37	35



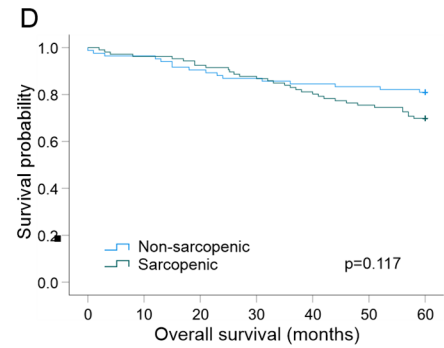
Number at risk

135	131	126	122	118	113	107
55	52	48	44	39	37	35



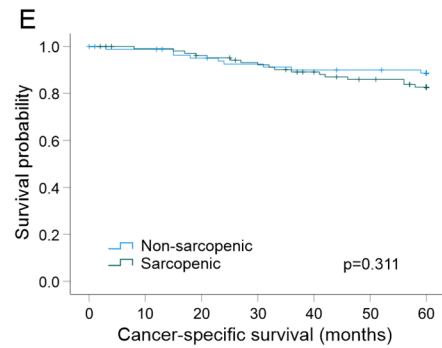
Number at risk

135	127	107	105	103	99	96
54	48	42	38	35	34	33



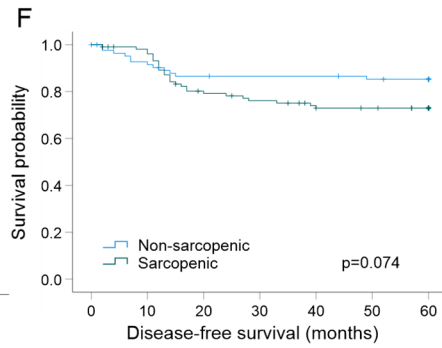
Number at risk

84	81	76	73	71	70	68
106	102	98	93	86	80	74



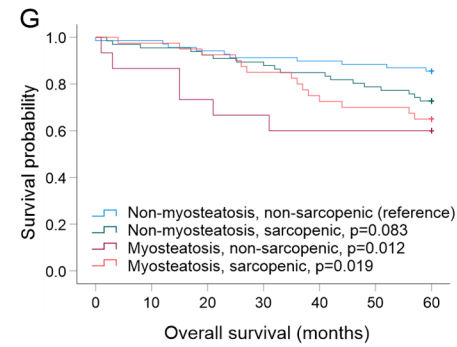
Number at risk

84	81	76	73	71	70	68
106	102	98	93	86	80	74



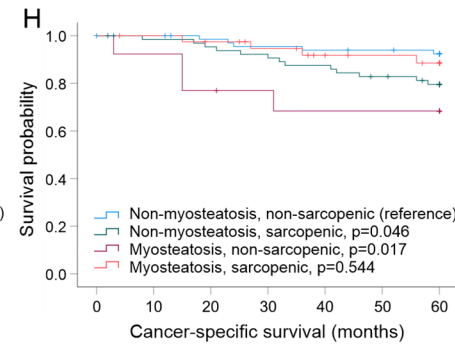
Number at risk

84	76	70	69	69	67	66
105	99	79	74	69	66	63



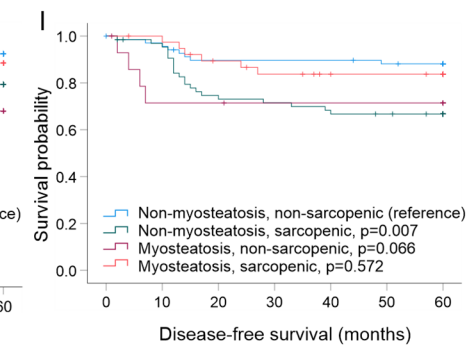
Number at risk

69	68	65	63	62	61	59
66	63	61	59	56	52	48
15	13	11	10	9	9	9
40	39	37	37	30	28	26



Number at risk

69	68	65	63	62	61	59
66	63	61	59	56	52	48
15	13	11	10	9	9	9
40	39	37	37	30	28	26



Number at risk

69	66	60	60	60	58	57
66	61	47	45	43	41	39
15	10	10	9	9	9	9
39	38	32	29	26	25	24

**Supplementary Figure S2.** Kaplan-Meier survival curves for stage I-III patients (**A**) myosteatorsis and overall survival, (**B**) myosteatorsis and cancer-specific survival, (**C**) myosteatorsis and disease-free survival, (**D**) sarcopenia and overall survival, (**E**) sarcopenia and cancer-specific survival, (**F**) sarcopenia and disease-free survival, (**G**) the presence of myosteatorsis and sarcopenia and overall survival, (**H**) the presence of myosteatorsis and sarcopenia and cancer-specific survival, (**I**) the presence of myosteatorsis and sarcopenia and disease-free survival.