

**Supplementary Table 1. Baseline Patient Clinicopathologic Characteristics (Patients without serum ApoA1 and ApoB)**

		Progression-free survival		P <sup>a</sup>	Overall survival		P <sup>a</sup>
		No progression	Progression		Survival	Death	
		(n=1015)(%)	(n=160)(%)		(N=1060)(%)	(N=115)(%)	
Age(yr)( mean±SD)		58.26±11.79	56.54±12.73	0.090	58.28±11.86	55.75±12.41	0.031
Sex	Male	597(58.82)	98(61.25)	0.604	617(58.21)	78(67.83)	0.047
	Female	418(41.18)	62(38.75)		443(41.79)	37(32.17)	
Tumor Location	Colon	572(56.35)	87(54.38)	0.669	594(56.04)	65(56.52)	0.999
	Rectum	443(43.65)	73(45.63)		466(43.96)	50(43.48)	
TNM	I	158(15.57)	3(1.875)	<0.001	158(14.91)	3(2.61)	<0.001
	II	372(36.65)	20(1.25)		369(34.81)	23(20.00)	
	III	426(41.97)	48(30.00)		422(39.81)	52(45.22)	

	IV	59(5.81)	89(55.63)		111(10.47)	37(32.17)	
	d<2	51(5.03)	10(6.25)		57(5.38)	4(3.48)	
Tumor size(cm)	2≤d<5	620(61.08)	93(58.13)	0.697	651(61.42)	62(38.75)	0.113
	d>5	344(33.89)	57(35.63)		352(33.21)	49(30.63)	
	Low	148(14.58)	18(11.25)		147(13.87)	19(16.52)	
Differentiation	Medium	807(79.51)	135(84.38)	0.356	850(80.19)	92(80.00)	0.444
	High	60(5.91)	7(4.375)		63(5.94)	4(3.48)	
	No	1003(98.82)	159(99.38)		1048(98.87)	114(99.13)	
Circumferential margin	Yes	12(1.18)	1(0.63)	0.999	12(1.13)	1(0.87)	0.999
	No	838(82.56)	128(80.00)		872(82.26)	94(81.74)	
Vascular tumor thrombus	Yes	177(17.44)	32(20.00)	0.437	188(17.74)	21(18.26)	0.898
	No	795(78.33)	125(78.13)		831(78.40)	89(77.39)	
Nerve invasion	Yes	220(21.67)	35(21.88)	0.999	229(21.60)	26(22.61)	0.812

Chemotherapy	No	471(46.40)	66(41.25)	0.233	466(43.96)	71(61.74)	<0.001
	Yes	544(53.60)	94(58.75)		594(53.21)	44(38.26)	
Radiotherapy	No	961(94.68)	141(88.13)	0.004	991(93.49)	111(96.52)	0.306
	Yes	54(5.32)	19(11.88)		69(6.51)	4(3.48)	
HDL-C(mmol/L)		1.17±0.32	1.14±0.31	0.247	1.17±0.31	1.14±0.35	0.336
LDL-C(mmol/L)		2.60±0.74	2.59±0.87	0.963	2.59±0.74	2.62±0.94	0.745

---

<sup>a</sup>P was calculated by the Student's t-test for continuous variables and the Chi-square test for categorical variables.

Supplementary table Stratified analysis of Clinical Characteristics for PFS and OS

Supplementary Table 2. The association between HDL-C with overall survival and progression-free survival in patients with colorectal cancer among different subgroups.

		Progression-free survival			Overall survival		
		N	progression	HR (95%CI)	N	death	HR (95%CI)
Age(yr)	<65	1153	209	0.717(0.511-1.006)	1153	139	0.505(0.337-0.756)
	≥65	543	99	0.788(0.486-1.277)	543	63	0.557(0.311-0.997)
Sex	male	1016	195	0.760(0.540-1.070)	1016	136	0.563(0.380-0.834)
	female	680	113	0.656(0.411-1.047)	680	66	0.458(0.248-0.845)
TNM	I / II	796	58	0.812(0.410-1.609)	796	41	0.587(0.270-1.276)
	III / IV	900	250	0.679(0.502-0.919)	900	161	0.489(0.340-0.705)
Tumor	colon	979	178	0.834(0.563-1.236)	979	118	0.550(0.348-0.869)

Location	rectum	717	130	0.623(0.420-0.924)	717	84	0.456(0.282-0.738)
Tumor size(cm)	d<2	73	12	0.175(0.036-0.860)	73	6	0.287(0.032-2.603)
	2≤d<5	1087	201	0.680(0.477-0.970)	1087	123	0.540(0.347-0.839)
	d≥5	536	95	0.718(0.452-1.142)	536	73	0.547(0.326-0.917)
	low	222	36	0.495(0.243-1.007)	220	30	0.313(0.148-0.662)
Differentiation	medium	1357	253	0.695(0.511-0.946)	1357	160	0.575(0.390-0.847)
	high	117	19	1.651(0.381-7.163)	117	12	1.021(0.218-4.780)

---

**Supplementary Table 3. The association between LDL-C with overall survival and progression-free survival in patients with colorectal cancer among different subgroups.**

		Progression-free survival			Overall survival		
		N	progression	HR (95%CI)	N	death	HR (95%CI)
Age(yr)	<65	1153	209	0.930(0.692-1.250)	1153	139	1.233(0.731-2.080)
	≥65	543	99	0.754(0.492-1.155)	543	63	2.126(1.104-4.095)
Sex	male	1016	195	0.855(0.635-1.152)	1016	136	1.225(0.714-2.100)
	female	680	113	0.914(0.599-1.395)	680	66	2.224(1.182-4.184)
TNM	I / II	796	58	0.655(0.380-1.130)	796	41	0.670(0.162-2.777)
	III / IV	900	250	0.930(0.709-1.220)	900	161	1.656(1.078-2.543)
Tumor	colon	979	178	0.989(0.714-1.370)	979	118	1.311(0.760-2.263)
Location	rectum	717	130	0.736(0.511-1.062)	717	84	1.786(0.968-3.293)
Tumor	d<2	73	12	0.319(0.099-1.027)	73	6	6.037(1.007-36.173)

size(cm)	2≤d<5	1087	201	0.867(0.643-1.170)	1087	123	1.542(0.922-2.579)
	d≥5	536	95	1.053(0.674-1.647)	536	73	1.260(0.604-2.629)
	low	222	36	1.253(0.604-2.598)	220	30	1.815(0.630-5.227)
Differentiation	medium	1357	253	0.782(0.600-1.021)	1357	160	1.467(0.926-2.326)
	high	117	19	1.293(0.428-3.909)	117	12	2.252(0.480-10.570)

---

**Supplementary Table 4. The association between HDL-C/LDL-C with overall survival and progression-free survival in patients with colorectal cancer among different subgroups.**

		Progression-free survival			Overall survival		
		N	progression	HR (95%CI)	N	death	HR (95%CI)
Age(yr)	<65	1153	209	0.778(0.534-1.134)	1153	139	0.716(0.457-1.123)
	≥65	543	99	0.642(0.395-1.045)	543	63	0.482(0.269-0.863)
Sex	male	1016	195	0.786(0.542-1.138)	1016	136	0.791(0.505-1.239)
	female	680	113	0.625(0.381-1.025)	680	66	0.386(0.216-0.691)
TNM	I / II	796	58	0.840(0.380-1.858)	796	41	0.702(0.295-1.672)
	III / IV	900	250	0.678(0.492-0.934)	900	161	0.583(0.395-0.859)
Tumor	colon	979	178	0.756(0.502-1.139)	979	118	0.559(0.351-0.889)
Location	rectum	717	130	0.682(0.443-1.051)	717	84	0.716(0.413-1.240)
Tumor	d<2	73	12	1.212(0.156-9.418)	73	6	0



size(cm)	2≤d<5	1087	201	0.706(0.485-1.026)	1087	123	0.567(0.359-0.895)
	d≥5	536	95	0.645(0.390-1.067)	536	73	0.603(0.341-1.065)
	low	222	36	0.612(0.267-1.399)	220	30	0.427(0.182-1.000)
Differentiation	medium	1357	253	0.739(0.530-1.029)	1357	160	0.660(0.440-0.989)
	high	117	19	0.396(0.124-1.266)	117	12	0.766(0.166-3.544)

---

**Supplementary Table 5. The association between ApoA1 with overall survival and progression-free survival in patients with colorectal cancer among different subgroups.**

		Progression-free survival			Overall survival		
		N	progression	HR (95%CI)	N	death	HR (95%CI)
Age(yr)	<65	330	90	0.673(0.436-1.038)	330	49	0.635(0.361-1.117)
	≥65	191	58	0.487(0.286-0.829)	191	38	0.608(0.320-1.154)
Sex	male	321	97	0.593(0.396-0.889)	321	58	0.663(0.393-1.118)
	female	200	51	0.673(0.350-1.297)	200	29	0.692(0.327-1.463)
TNM	I / II	243	35	0.473(0.232-0.966)	243	15	0.690(0.250-1.902)
	III / IV	278	113	0.659(0.453-0.960)	278	72	0.610(0.382-0.973)
Tumor	colon	320	91	0.760(0.478-1.209)	320	53	0.630(0.366-1.083)
Location	rectum	201	57	0.496(0.292-0.845)	201	34	0.572(0.271-1.207)
Tumor	d<2	12	2	0.378(0.024-6.076)	12	2	0

size(cm)	2≤d<5	374	108	0.512(0.345-0.758)	374	61	0.658(0.397-1.089)
	d≥5	135	38	0.899(0.460-1.760)	135	24	0.371(0.159-0.869)
	low	56	18	0.645(0.238-1.747)	56	11	0.648(0.198-2.125)
Differentiation	medium	415	118	0.590(0.404-0.860)	415	68	0.611(0.379-0.986)
	high	50	12	0.714(0.223-2.285)	50	8	0.493(0.117-2.075)

---

**Supplementary Table 6. The association between ApoB with overall survival and progression-free survival in patients with colorectal cancer among different subgroups.**

		Progression-free survival			Overall survival		
		N	progression	HR (95%CI)	N	death	HR (95%CI)
Age(yr)	<65	330	90	0.744(0.491-1.126)	330	49	0.594(0.339-1.041)
	≥65	191	58	0.894(0.521-1.536)	191	38	1.221(0.622-2.396)
Sex	male	321	97	0.825(0.552-1.232)	321	58	0.861(0.512-1.446)
	female	200	51	0.796(0.453-1.399)	200	29	0.721(0.327-1.590)
TNM	I / II	243	35	0.612(0.298-1.259)	243	15	2.049(0.578-7.261)
	III / IV	278	113	0.812(0.560-1.176)	278	72	0.691(0.435-1.097)
Tumor	colon	320	91	0.820(0.540-1.246)	320	53	0.877(0.507-1.516)
Location	rectum	201	57	0.809(0.480-1.365)	201	34	0.747(0.380-1.468)
Tumor	d<2	12	2	0	12	2	0

size(cm)	2≤d<5	374	108	0.860(0.584-1.266)	374	61	0.871(0.521-1.456)
	d≥5	135	38	0.780(0.409-1.485)	135	24	0.963(0.412-2.246)
	low	56	18	0.672(0.259-1.745)	56	11	1.070(0.313-3.656)
Differentiation	medium	415	118	0.712(0.494-1.026)	415	68	0.786(0.486-1.270)
	high	50	12	2.573(0.691-9.580)	50	8	0.654(0.162-2.649)

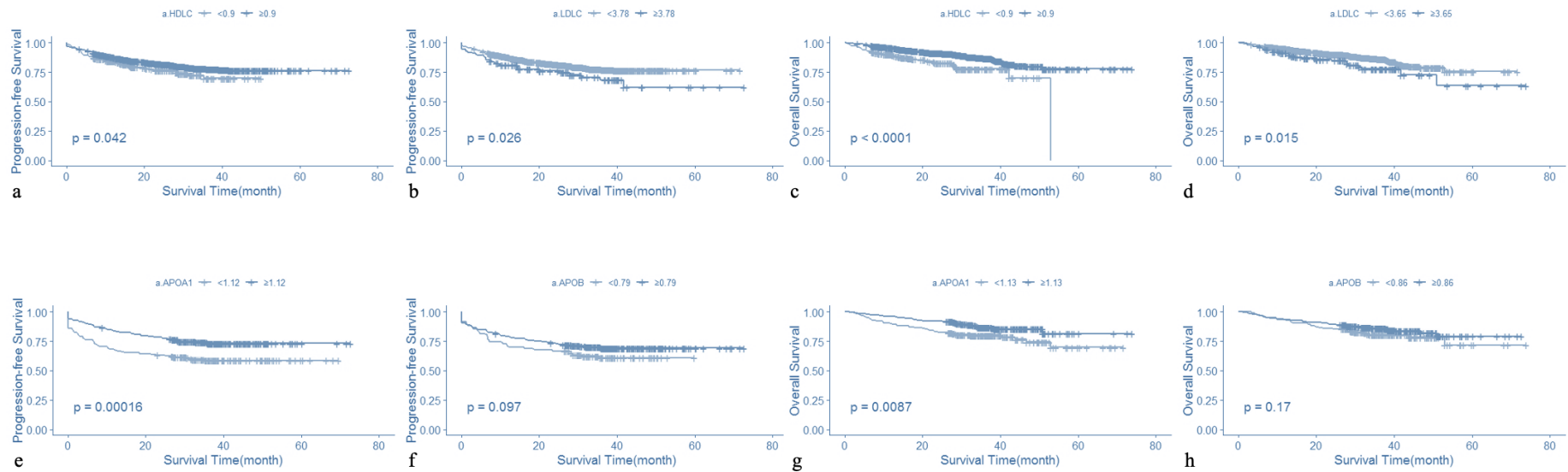
---

**Supplementary Table 7. The association between ApoA1/ApoB with overall survival and progression-free survival in patients with colorectal cancer among different subgroups.**

		Progression-free survival			Overall survival		
		N	progression	HR(95%CI)	N	death	HR(95%CI)
Age(yr)	<65	330	90	0.579(0.340-0.985)	330	49	0.375(0.184-0.764)
	≥65	191	58	0.365(0.171-0.779)	191	38	0.641(0.227-1.811)
Sex	male	321	97	0.553(0.329-0.929)	321	58	0.566(0.286-1.123)
	female	200	51	0.330(0.135-0.805)	200	29	0.368(0.123-1.094)
TNM	I / II	243	35	0.755(0.231-2.471)	243	15	0.806(0.106-6.145)
	III / IV	278	113	0.465(0.290-0.748)	278	72	0.453(0.248-0.826)
Tumor	colon	320	91	0.645(0.342-1.214)	320	53	0.575(0.246-1.348)
Location	rectum	201	57	0.485(0.264-0.889)	201	34	0.436(0.196-0.969)
Tumor	d<2	12	2	0	12	2	0

size(cm)	2≤d<5	374	108	0.427(0.261-0.700)	374	61	0.432(0.224-0.832)
	d≥5	135	38	0.704(0.275-1.803)	135	24	0.478(0.141-1.626)
	low	56	18	0.243(0.085-0.696)	56	11	0.156(0.041-0.593)
Differentiation	medium	415	118	0.577(0.334-0.996)	415	68	0.581(0.287-1.174)
	high	50	12	0.482(0.151-1.535)	50	8	0.507(0.102-2.530)

---



**Supplementary Figure1.** The Kaplan-Meier curves for PFS and OS of colorectal cancer patients according to basic lipid indicators (HDL-C, LDL-C, ApoA1 and ApoB). a. The Kaplan-Meier curves for PFS of colorectal cancer patients according to HDL-C ratio. b. The Kaplan-Meier curves for PFS of colorectal cancer patients according to LDL-C ratio. c. The Kaplan-Meier curves for OS of colorectal cancer patients according to HDL-C ratio. d. The Kaplan-Meier curves for OS of colorectal cancer patients according to LDL-C ratio. e. The Kaplan-Meier curves for PFS of colorectal cancer patients according to ApoA1. f. The Kaplan-Meier curves for



PFS of colorectal cancer patients according to ApoB. g. The Kaplan-Meier curves for OS of colorectal cancer patients according to ApoA1. h. The Kaplan-Meier curves for OS of colorectal cancer patients according to ApoB.