



Figure S1 XXXXXXXXXXXXXXXXXXXX. CRC, colorectal cancer; KRAS, Kirsten rat sarcoma viral oncogene homolog;

Table S1 Univariate Cox regression analysis

Variable	Univariate analysis		
	HR	95% CI	P value
Gender (female vs. male)	1.143	0.757–1.727	0.524
Age (>60 vs. ≤60)	1.219	0.805–1.845	0.35
BMI			
Normal vs. underweight	0.491	0.269–0.898	0.021
Overweight vs. underweight	0.562	0.298–1.062	0.076
Obese vs. underweight	0.465	0.153–1.413	0.177
Tumor location (right vs. left)	1.315	0.813–2.215	0.265
Tumor differentiation (poor vs. well)	7.29	2.167–24.525	0.001
TNM stage (IV vs. I + II)	7.881	4.297–14.454	<0.001
MS status (MSI-H vs. MSS)	0.282	0.103–0.768	0.013
CEA (>5 vs. ≤5)	2.58	1.630–4.085	<0.001
Curative resection (yes vs. no)	0.184	0.114–0.296	<0.001
Radiotherapy (yes vs. no)	1.254	0.735–2.138	0.406
Chemotherapy (yes vs. no)	2.878	1.331–6.225	0.007
KRAS			
Exon 2 mutation	1.978	1.210–3.233	0.007
Exon 3 mutation	0.596	0.140–2.543	0.484
Exon 4 mutation	1.549	0.692–3.464	0.287

BMI, body mass index; CEA, carcinoembryonic; CI, confidence interval; HR, hazard ratio; KRAS, Kirsten rat sarcoma viral oncogene homolog; MS, microsatellite; MSI-H, microsatellite instability-high; MSS, microsatellite stable; TNM, tumor-node-metastasis.

Table S2 Exploratory stage III model and stage-by-KRAS interaction test

Variable	HR (95% CI)	P value
Stage III only (exploratory)		
Age	1.00 (0.97–1.03)	0.952
Female (vs. male)	0.89 (0.34–2.28)	0.803
KRAS exon 2 (vs. non-exon 2)	0.59 (0.23–1.48)	0.26
Stage interaction model (IV vs. I–III)		
Age	1.02 (1.00–1.03)	0.098
Female (vs. male)	1.03 (0.66–1.62)	0.888
Stage IV (vs. I–III)	6.34 (3.19–12.60)	<0.001
KRAS exon 2 (vs. non-exon 2)	1.05 (0.52–2.12)	0.890
Stage IV × KRAS exon 2 (interaction)	0.86 (0.35–2.16)	0.755

Interaction term tests whether the association of KRAS exon 2 with OS differs between stage IV and stages I–III. CI, confidence interval; HR, hazard ratio; KRAS, Kirsten rat sarcoma viral oncogene homolog; OS, overall survival.

Table S3 Multivariable Cox regression for OS

Variable	Multivariable analysis		
	HR	95% CI	P-value
Age	1.01	0.99–1.03	0.162
Sex			
Male	Reference	–	–
Female	1.02	0.61–1.72	0.927
Pathological stage			
Stage I	Reference	–	–
Stage II	0.56	0.16–1.99	0.374
Stage III	1.10	0.35–3.47	0.868
Stage IV	4.44	1.53–12.92	0.006
KRAS exon 2 (vs. non-exon 2)	0.87	0.52–1.48	0.618
Co-mutations			
TP53 mutation (yes vs. no)	1.23	0.67–2.24	0.506
APC mutation (yes vs. no)	0.68	0.39–1.20	0.186
PIK3CA mutation (yes vs. no)	1.24	0.62–2.48	0.551
BRAF mutation (yes vs. no)	1.05	0.14–7.86	0.961

Adjusted for age, sex, pathological stage, KRAS exon 2 status, and TP53/APC/PIK3CA/BRAF mutations. Estimates are based on the complete-case dataset used for modeling. CI, confidence interval; HR, hazard ratio; KRAS, Kirsten rat sarcoma viral oncogene homolog; OS, overall survival.