

Table S1: Clinical and molecular characteristics of 110 metastatic colorectal cancer patients evaluated in present study. *PR*: partial response; *SD*: stable disease; *PD*: progressive disease; *T*: primary tumor; *M*: metastatic site; *ex*: exon; *IHC*: immunohistochemistry; -: not evaluated; NE: not evaluable.

ID	Tumor Site	Best Response	KRAS (T)	KRAS (M)	PIK3CA ex9 (T)	PIK3CA ex9 (M)	PIK3CA ex20 (T)	PIK3CA ex20 (M)	PTEN IHC (T)
1	colon	PR	WT	-	WT	-	WT	-	normal
2	rectum	PD	-	G12D	-	E545K	-	WT	normal
3	rectum	PD	WT	-	WT	-	WT	-	-
4	colon	PD	G13V	-	WT	-	WT	-	-
5	colon	SD	WT	-	WT	-	WT	-	normal
6	rectum	PD	WT	-	WT	-	WT	-	-
7	colon	PD	WT	-	NE	-	H1047R	-	-
8	colon	PD	WT	-	WT	-	WT	-	-
9	colon	SD	G12V	-	WT	-	WT	-	normal
10	rectum	SD	NE	NE	WT	-	WT	-	-
11	rectum	PD	WT	WT	WT	WT	WT	H1047R	normal
12	colon	PR	WT	-	WT	-	WT	-	normal
13	colon	SD	G12V	-	WT	-	WT	-	-
14	colon	SD	WT	-	WT	-	WT	-	-
15	colon	PR	WT	-	WT	-	WT	-	normal
16	sigma-rectum junction	PD	WT	-	WT	-	WT	-	-
17	colon	PD	WT	-	WT	-	WT	-	-
18	colon	SD	G13D	-	WT	-	WT	-	loss
19	sigma-rectum junction	PR	WT	-	WT	-	WT	-	-
20	colon	PD	G12S	-	WT	-	WT	-	-
21	other	PD	WT	-	WT	-	WT	-	loss
22	colon	SD	G12D	-	WT	-	WT	-	-
23	colon	PD	WT	-	WT	-	WT	-	loss
24	colon	PD	G12D	-	WT	-	WT	-	loss
25	colon	SD	WT	-	WT	-	H1047R	-	-
26	rectum	PD	WT	-	WT	-	WT	-	loss
27	sigma-rectum junction	PD	WT	-	WT	-	WT	-	normal
28	colon	PD	WT	-	WT	-	WT	-	normal

29	colon	SD	G12A	G12A	WT	-	WT	-	normal
30	sigma-rectum junction	PD	G13D	-	WT	-	WT	-	loss
31	colon	SD	WT	-	WT	-	WT	-	-
32	colon	SD	WT	-	WT	-	WT	-	loss
33	colon	PD	WT	-	WT	-	WT	-	loss
34	rectum	PD	WT	-	WT	-	WT	-	loss
35	colon	PD	WT	-	WT	-	WT	-	normal
36	rectum	SD	G12D	-	WT	-	WT	-	-
37	colon	PR	G13D	-	WT	-	WT	-	-
38	rectum	PR	WT	WT	WT	WT	WT	H1047R	normal
39	sigma-rectum junction	SD	WT	-	WT	-	WT	-	-
40	colon	SD	WT	-	WT	-	WT	-	normal
41	colon	SD	WT	-	WT	-	WT	-	-
42	colon	PD	WT	-	WT	-	H1047R	-	normal
43	sigma-rectum junction	PR	WT	-	WT	-	WT	-	normal
44	rectum	1	WT	-	WT	-	WT	-	-
45	rectum	PD	G13D	-	WT	-	WT	-	-
46	rectum	PR	WT	-	WT	-	WT	-	normal
47	colon	PR	G13D	-	WT	-	WT	-	-
48	rectum	SD	WT	-	WT	-	H1047R	-	-
49	rectum	PR	WT	-	WT	-	WT	-	normal
50	colon	PD	WT	-	WT	-	WT	-	loss
51	colon	SD	WT	-	WT	-	WT	-	loss
52	colon	PD	WT	-	NE	-	H1047R	-	normal
53	sigma-rectum junction	PR	WT	-	WT	-	WT	-	normal
54	rectum	PD	G12V	-	WT	-	WT	-	loss
55	sigma-rectum junction	PR	WT	-	E545K	-	WT	-	normal
56	colon	PD	G12V	-	WT	-	WT	-	-
57	rectum	PD	WT	-	WT	-	WT	-	loss
58	colon	PR	WT	-	WT	-	WT	-	-
59	colon	SD	WT	-	WT	-	WT	-	loss
60	sigma-rectum junction	PD	WT	-	A545 + Frameshift	-	WT	-	-

61	colon	PD	WT	-	WT	-	WT	-	normal
62	colon	PD	WT	-	WT	-	WT	-	-
63	colon	PD	G12D	-	WT	-	WT	-	loss
64	rectum	PD	WT	-	WT	-	H1047R	-	normal
65	colon	PD	WT	-	WT	-	WT	-	-
66	colon	SD	G12V	-	WT	-	WT	-	loss
67	colon	PD	WT	-	WT	-	WT	-	normal
68	other	PD	13GaC	-	WT	-	WT	-	loss
69	rectum	PD	12GcT	-	WT	-	WT	-	normal
70	colon	PD	WT	-	WT	-	H1047R	-	loss
71	colon	PD	12GcT	-	WT	-	WT	-	normal
72	rectum	PD	12GaT	-	WT	-	WT	-	loss
73	colon	PD	WT	-	WT	-	WT	-	loss
74	colon	PR	WT	-	WT	-	WT	-	normal
75	colon	PR	WT	-	WT	-	WT	-	normal
76	colon	PR	WT	-	WT	-	WT	-	normal
77	rectum	PD	13GaC	-	WT	-	H1047R	-	loss
78	colon	PD	12GaT	-	WT	-	WT	-	normal
79	colon	PR	WT	-	WT	-	WT	-	normal
80	colon	PD	WT	-	E545K	-	WT	-	loss
81	colon	PD	WT	-	WT	-	WT	-	normal
82	colon	PD	12tGT	-	WT	-	WT	-	loss
83	colon	PR	WT	-	WT	-	WT	-	normal
84	rectum	PR	WT	-	WT	-	WT	-	normal
85	rectum	SD	12GaT	-	WT	-	WT	-	normal
86	colon	PD	WT	-	WT	-	WT	-	loss
87	colon	PD	12GaT	-	WT	-	WT	-	normal
88	rectum	SD	WT	-	WT	-	H1047R	-	normal
89	rectum	PD	WT	-	WT	-	H1047R	-	loss
90	sigma-rectum junction	SD	WT	-	WT	-	WT	-	loss
91	colon	PR	WT	-	WT	-	WT	-	normal
92	colon	PD	WT	-	WT	-	WT	-	loss
93	colon	SD	WT	-	WT	-	WT	-	loss
94	sigma-rectum junction	SD	WT	-	WT	-	WT	-	normal
95	colon	PD	WT	-	E545K	-	WT	-	normal

96	colon	PD	WT	-	WT	-	WT	-	normal
97	colon	PR	WT	-	WT	-	WT	-	normal
98	rectum	SD	12GAT (G12S)	-	WT	-	WT	-	normal
99	rectum	SD	WT	-	WT	-	WT	-	normal
100	colon	SD	WT	-	WT	-	WT	-	normal
101	colon	SD	WT	-	WT	-	WT	-	loss
102	colon	PD	12CGT+13GAC (G12R+G13D)	-	WT	-	WT	-	normal
103	colon	PD	12 GCT	-	WT	-	WT	-	loss
104	colon	SD	12GCT (G12A)	-	WT	-	WT	-	normal
105	colon	SD	WT	-	WT	-	WT	-	normal
106	rectum	PD	WT	-	WT	-	WT	-	normal
107	colon	PR	WT	-	WT	-	WT	-	loss
108	rectum	SD	WT	-	WT	-	WT	-	normal
109	colon	PD	WT	-	WT	-	WT	-	loss
110	colon	SD	12GcT	-	WT	-	WT	-	normal