

Supplemental Tables for:

The prognostic impact of KRAS G12C mutation in patients with metastatic colorectal cancer: a multicenter retrospective observational study

Daisuke Kotani et al.

1 Supplementary Table 1. Patients characteristics of each *KRAS* exon2 mutation subtype.

Factor	<i>KRAS</i> exon2 mutation subtypes						<i>P</i> -value
	G12A (n = 31)	G12C (n = 45)	G12D (n = 261)	G12S (n = 36)	G12V (n = 151)	G13D (n = 160)	
Age, median (range)	64 (41–82)	65 (31–79)	65 (30–83)	61 (51–82)	65 (31–88)	65 (24–85)	0.786
Age, n (%)							0.638
≥ 65	14 (45.2)	24 (53.3)	134 (51.3)	15 (41.7)	80 (53.0)	90 (56.2)	
Gender, n (%)							0.883
Female	13 (41.9)	24 (53.3)	114 (43.7)	15 (41.7)	68 (45.0)	73 (45.6)	
Male	18 (58.1)	21 (46.7)	147 (56.3)	21 (58.3)	83 (55.0)	87 (54.4)	
ECOG PS, n (%)							0.659
0	21 (67.7)	31 (68.9)	200 (76.6)	28 (77.8)	113 (74.8)	122 (76.2)	

1	8 (25.8)	9 (20.0)	51 (19.5)	8 (22.2)	30 (19.9)	31 (19.4)
2	2 (6.5)	5 (11.1)	10 (3.8)	0 (0.0)	8 (5.3)	7 (4.4)

Primary tumor

0.579

Location, n (%)

right	11 (35.5)	16 (35.6)	92 (35.2)	10 (27.8)	38 (25.2)	58 (36.2)
left	20 (64.5)	29 (64.4)	169 (64.8)	26 (72.2)	112 (74.2)	101 (63.1)
missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.6)	1 (0.7)

Surgery on

0.738

Primary tumor, n (%)

Yes	14 (45.2)	21 (46.7)	95 (36.4)	13 (36.1)	54 (35.8)	61 (38.1)
No	17 (54.8)	24 (53.3)	166 (63.6)	23 (63.9)	97 (64.2)	99 (61.9)

Time of First

0.154

metastasis, n (%)

Metachronous	7 (22.6)	10 (22.2)	98 (37.5)	10 (27.8)	59 (39.1)	55 (34.4)
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Synchronous	24 (77.4)	35 (77.8)	163 (62.5)	26 (72.2)	92 (60.9)	105 (65.6)	
Histology, n (%)							0.679
well/mod	24 (77.4)	40 (88.9)	230 (88.1)	33 (91.7)	139 (92.1)	143 (89.4)	
por/muc	6 (19.4)	4 (8.9)	28 (10.7)	3 (8.3)	10 (6.6)	14 (8.8)	
missing	1 (3.2)	1 (2.2)	3 (1.1)	0 (0.0)	2 (1.3)	3 (1.9)	
Serum LDH IU/L,	227	221	208	212	205	217	
median (range)	(123–2139)	(140–1459)	(75–4340)	(145–3193)	(98–2873)	(122–3450)	0.704
GPS, n (%)							0.100
0	16 (51.6)	27 (60.0)	174 (66.7)	29 (80.6)	96 (63.6)	106 (66.2)	
1	7 (22.6)	10 (22.2)	46 (17.6)	3 (8.3)	34 (22.5)	19 (11.9)	
2	8 (25.8)	7 (15.6)	35 (13.4)	4 (11.1)	20 (13.2)	34 (21.2)	
missing	0 (0.0)	1 (2.2)	6 (2.3)	0 (0.0)	1 (0.7)	1 (0.6)	
Metastatic sites, n (%)							
Liver	20 (64.5)	30 (66.7)	155 (59.4)	17 (47.2)	83 (55.0)	92 (57.5)	0.488

Lung	15 (48.4)	18 (40.0)	102 (39.1)	16 (44.4)	74 (49.0)	62 (38.8)	0.377
Peritoneal dissemination	10 (32.3)	16 (35.6)	57 (21.8)	6 (16.7)	36 (23.8)	39 (24.4)	0.287
Number of							
Metastatic sites, n (%)							0.067
1	10 (32.3)	18 (40.0)	143 (54.8)	18 (50.0)	71 (47.0)	70 (43.8)	
≥ 2	21 (67.7)	27 (60.0)	118 (45.2)	18 (50.0)	80 (53.0)	90 (56.2)	

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2 *P*-values were calculated using the χ^2 test. Abbreviations: *KRAS*, Kirsten rat sarcoma; ECOG PS, Eastern Cooperative Oncology Group
3 performance status; well, well-differentiated; mod, moderately differentiated; por, poorly differentiated; muc, mucinous adenocarcinoma; LDH,
4 Lactate dehydrogenase; GPS, Glasgow prognostic score

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Supplementary Table 2. Patients' characteristics of each *KRAS* exon2 mutation subtype with doublet or triplet regimen.

	<i>KRAS</i> G12C mutations (n = 43)	<i>KRAS</i> non-G12C mutations (n = 619)	<i>P</i> -value
Age, median (range)	65 (31–79)	65 (24–88)	0.550
Age, n (%)			0.753
≥ 65	23 (53.5)	310 (50.1)	
Gender, n (%)			0.115
Female	24 (55.8)	268 (43.3)	
Male	19 (44.2)	351 (56.7)	
ECOG PS, n (%)			0.109
0	30 (69.8)	481 (77.7)	
1	9 (20.9)	118 (19.1)	

2	4 (9.3)	20 (3.2)	
Primary tumor location, n (%)			0.664
right	16 (37.2)	203 (32.8)	
left	27 (62.8)	414 (66.9)	
missing	0 (0.0)	2 (0.3)	
Surgery on primary tumor, n (%)			0.333
Yes	19 (44.2)	228 (36.8)	
No	24 (55.8)	391 (63.2)	
Time of First metastasis, n (%)			0.136
Metachronous	10 (23.3)	217 (35.1)	
Synchronous	33 (76.7)	402 (64.9)	
Histology, n (%)			0.685
well/mod	38 (88.4)	551 (89.0)	
por/muc	4 (9.3)	60 (9.7)	
missing	1 (2.3)	8 (1.3)	

Metastatic sites, n (%)			
Liver	29 (67.4)	357 (57.7)	0.263
Lung	18 (41.9)	262 (42.3)	1.000
Peritoneal dissemination	14 (32.6)	141 (22.8)	0.190
Number of metastatic sites, n (%)			0.270
1	17 (39.5)	304 (49.1)	
≥ 2	26 (60.5)	315 (50.9)	
Serum LDH IU/L, median (range)	221 (140–1459)	207 (75–4340)	0.459
GPS, n (%)			0.654
0	26 (60.5)	410 (66.2)	
1	10 (23.3)	103 (16.6)	
2	6 (13.9)	97 (15.7)	
missing	1 (2.3)	9 (1.5)	
First-line backbone regimen, n (%)			0.247
Doublet*	43 (100.0)	591 (95.5)	

Triplet**	0 (0.0)	28 (4.5)	
First-line bevacizumab, n (%)			0.535
Yes	9 (20.9)	107 (17.3)	
No	34 (79.1)	512 (82.7)	

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2 *P*-values were calculated using Fisher's exact probability test for categorical variables.

3 Abbreviations: *KRAS*, Kirsten rat sarcoma; ECOG PS, Eastern Cooperative Oncology Group performance status; well, well-differentiated; mod,
 4 moderately differentiated; por, poorly differentiated; muc, mucinous adenocarcinoma; LDH, Lactate dehydrogenase; GPS, Glasgow prognostic
 5 score

6 Doublet* indicates oxaliplatin based regimens (FOLFOX, CAPOX and SOX) or irinotecan-based regimens (FOLFIRI, IRIS [SIRB], CAPIRI).

7 Triplet** indicates FOLFOXIRI.