

Supplementary Online Content

Mackintosh C, Yuan C, Ou F-S, et al. Association of coffee intake with survival in patients with advanced or metastatic colorectal cancer. *JAMA Oncol*. Published online September 17, 2020. doi:10.1001/jamaoncol.2020.3938

eMethods. Determination of *KRAS* and *NRAS* Mutation Status

eTable. Baseline Characteristics by Frequency of Total Coffee Consumption

This supplementary material has been provided by the authors to give readers additional information about their work.

eMethods. Determination of *KRAS* and *NRAS* Mutation Status

Patients who consented to be tested for *KRAS* agreed to submit two archival paraffin-embedded tumor tissue sections and one histology reference slide or one paraffin-embedded tumor block of previously resected primary colorectal tumor and/or a metastatic tumor deposit. *KRAS* and *NRAS* mutation status was determined using BEAMing (beads, emulsion, amplification, magnetics; Hamburg, Germany) technology.

eTable. Baseline Characteristics by Frequency of Total Coffee Consumption

Characteristic	Frequency of total coffee consumption					P Value ^a
	Never (n=280)	<1 cup/d (n=301)	1 cup/d (n=298)	2-3 cups/d (n=229)	≥4 cups/d (n=63)	
Age, years, median (range)	54 (22-84)	58 (21-82)	63 (24-85)	62 (36-82)	59 (42-82)	<.001
Male, No. (%)	142 (50.7)	180 (59.8)	179 (60.1)	141 (61.6)	52 (82.5)	<.001
Race, No. (%)						<.001
White	223 (79.6)	237 (78.7)	269 (90.3)	217 (94.8)	61 (96.8)	
Black	33 (11.8)	53 (17.6)	19 (6.4)	7 (3.1)	2 (3.2)	
Other	16 (5.7)	8 (2.7)	6 (2.0)	3 (1.3)	0	
Unknown	8 (2.9)	3 (1.0)	4 (1.3)	2 (0.9)	0	
ECOG performance status ^b , No. (%)						.78
0	167 (59.6)	185 (61.5)	191 (64.1)	147 (64.2)	38 (60.3)	
1-2	113 (40.4)	116 (38.5)	107 (35.9)	82 (35.8)	25 (39.7)	
Prior adjuvant chemotherapy, No. (%)						.07
No	253 (90.4)	262 (87.0)	249 (83.6)	200 (87.3)	50 (79.4)	
Yes	27 (9.6)	39 (13.0)	49 (16.4)	29 (12.7)	13 (20.6)	
Chemotherapy backbone, No. (%)						.51
mFOLFOX6	210 (75.0)	244 (81.1)	229 (76.8)	178 (77.7)	49 (77.8)	
FOLFIRI	70 (25.0)	57 (18.9)	69 (23.2)	51 (22.3)	14 (22.2)	
Assigned treatment arm, No. (%)						.23
Bevacizumab	101 (36.1)	109 (36.2)	121 (40.6)	98 (42.8)	25 (39.7)	
Cetuximab	103 (36.8)	123 (40.9)	105 (35.2)	67 (29.3)	26 (41.3)	
Bevacizumab + cetuximab	76 (27.1)	69 (22.9)	72 (24.2)	64 (27.9)	12 (19.0)	
Disease extent, No. (%)						.66
Locally advanced	5 (1.8)	3 (1.0)	3 (1.0)	4 (1.7)	2 (3.2)	
Metastatic	274 (97.9)	294 (97.7)	294 (98.7)	223 (97.4)	61 (96.8)	
Missing	1 (0.4)	4 (1.3)	1 (0.3)	2 (0.9)	0	
Primary tumor location, No. (%)						.37
Left	176 (62.9)	182 (60.5)	162 (54.4)	128 (55.9)	39 (61.9)	
Right	68 (24.3)	76 (25.2)	79 (26.5)	68 (29.7)	21 (33.3)	
Transverse	18 (6.4)	22 (7.3)	26 (8.7)	14 (6.1)	1 (1.6)	
Multiple	2 (0.7)	1 (0.3)	3 (1.0)	0	0	
Unknown	16 (5.7)	20 (6.6)	28 (9.4)	19 (8.3)	2 (3.2)	

<i>RAS</i> status, No. (%)						.27
Wild-type	84 (30.0)	92 (30.6)	109 (36.6)	87 (38.0)	22 (34.9)	
Mutant	69 (24.6)	71 (23.6)	73 (24.5)	62 (27.1)	15 (23.8)	
Unknown	127 (45.4)	138 (45.9)	116 (38.9)	80 (34.9)	26 (41.3)	
Diabetes status, No. (%)						.97
No	231 (82.5%)	247 (82.1%)	245 (82.2%)	190 (83.0%)	54 (85.7%)	
Yes	49 (17.5%)	54 (17.9%)	53 (17.8%)	39 (17.0%)	9 (14.3%)	
Body mass index, kg/m ² , median (range)	28.0 (15.4-59.2)	27.5 (17.1-54.8)	27.5 (15.8-48.4)	27.2 (15.4-58.4)	27.5 (16.8-52.5)	.59
Physical activity, MET-h/week, median (range)	4 (0-174)	4 (0-123)	3 (0-113)	4 (0-132)	3 (0-113)	.90
Smoking status, No. (%)						<.001
Never	170 (60.7)	151 (50.2)	137 (46.0)	56 (24.5)	12 (19.0)	
Past	95 (33.9)	128 (42.5)	132 (44.3)	131 (57.2)	31 (49.2)	
Current	12 (4.3)	20 (6.6)	28 (9.4)	41 (17.9)	19 (30.2)	
Missing	3 (1.1)	2 (0.7)	1 (0.3)	1 (0.4)	1 (1.6)	
Aspirin use, No. (%)						<.001
No	241 (86.1%)	218 (72.4%)	199 (66.8%)	164 (71.6%)	45 (71.4%)	
Yes	39 (13.9%)	81 (26.9%)	97 (32.6%)	64 (27.9%)	18 (28.6%)	
Unknown	0	2 (0.7%)	2 (0.7%)	1 (0.4%)	0	
Total energy intake, kcal/day, median (range)	1729 (601-4038)	1714 (526-4012)	1829 (560-3946)	1956 (669-4088)	2237 (791-4122)	<.001
Alcohol intake, energy-adjusted, g/day, median (range)	0 (0-91)	0 (0-95)	1 (0-87)	1 (0-137)	1 (0-29)	<.001
Caffeine intake, energy-adjusted, mg/day, median (range)	23 (0-431)	42 (1-454)	115 (3-375)	247 (6-754)	397 (31-2011)	<.001

ECOG, Eastern Cooperative Oncology Group; MET, metabolic equivalent

^aKruskal-Wallis test used to compare continuous variables; chi-square test or Fisher's exact test used to compare categorical variables.

^bGrade 0 = fully active, able to carry on all pre-disease performance without restriction; grade 1 = restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, e.g., light house work, office work; grade 2 = ambulatory and capable of all selfcare but unable to carry out any work activities, up and about more than 50% of waking hours.