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Molecular residual disease and efficacy of adjuvant chemotherapy in patients with colorectal cancer

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Molecular Residual Disease and Efficacy of Adjuvant Chemotherapy in Patients with Clinical Stage II-IV Colorectal Cancer

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Supplementary Tables

Supplementary Table 1. Baseline characteristics of high-risk stage II and III patients with post-surgical ctDNA negative result (4-week) further stratified by ACT status

High-risk stage II-III patients with postsurgical ctDNA-negative status		Adjuvant chemotherapy N= 219 (%)	No-Adjuvant Chemotherapy (Observation) N=312 (%)	P-value**
Age	Median (range)	66 (25-89)	71 (44-93)	-
	< 70 years old	152 (69.4)	142 (45.5)	0.0001
	>70 years old	67 (30.6)	170 (54.5)	
Sex	Male	109 (49.8)	156 (50)	0.96
	Female	110 (50.2)	156 (50)	
ECOG PS	0	200 (91.3)	254 (81.4)	0.001
	1	19 (8.7)	58 (18.6)	
Primary location	Right-sided colon	90 (41.1)	145 (46.5)	0.35
	Left-sided colon	121 (55.3)	160 (51.3)	
	Rectum	8 (3.6)	7 (2.2)	
Pathological T stage	T1-2	9 (4.1)	8 (2.6)	0.31
	T3-4	210 (95.9)	304 (97.4)	
Pathological N stage	N0	39 (17.8)	194 (62.2)	0.0001
	N1-2	180 (82.2)	118 (37.8)	
Pathological stage	High risk Stage II	38 (17.3)	187 (60)	0.0001
	Stage III	181 (82.7)	125 (40)	

RAS/BRAF status	RAS/BRAF wild-type	108 (49.3)	149 (48.1)	0.95
	RAS mutant	87 (39.7)	125 (40.3)	
	BRAF mutant	24 (11)	36 (11.6)	
MSI status	MSI-High	21 (9.6)	52 (16.7)	0.01
	MSS	198 (90.4)	260 (83.3)	

**The p-values are calculated using the two-sided chi-square test that compares the distribution of the factors between the two columns (ACT vs Observation) with no correction for multiplicity.

Supplementary Table 2. Baseline characteristics of high-risk stage II and III patients with post-surgical ctDNA positive result (4-week) further stratified by ACT status

High-risk stage II-III patients with postsurgical ctDNA-positive status		Adjuvant chemotherapy N=72 (%)	No-Adjuvant chemotherapy (Observation) N=41 (%)	P-value**
Age	Median (range)	67.5 (39-85)	73 (42-88)	-
	< 70 years old	44 (61.1)	15 (36.6)	0.01
	>70 years old	28 (38.9)	26 (63.4)	
Sex	Male	40 (55.6)	30 (73.2)	0.06
	Female	32 (44.4)	11 (26.8)	
ECOG PS	0	65 (90.3)	30 (73.2)	0.01
	1	7 (9.7)	11 (76.8)	
Primary location	Right-sided colon	29 (40.3)	14 (34.1)	0.76
	Left-sided colon	42 (58.3)	26 (63.4)	

	Rectum	1 (1.4)	1 (2.5)	
Pathological T stage	T1-2	5 (7)	0 (0)	0.08
	T3-4	67 (93)	41 (100)	
Pathological N stage	N0	10 (13.9)	12 (29.3)	0.05
	N1-2	62 (86.1)	29 (70.7)	
Pathological stage	Stage II	9 (12.5)	13 (31.7)	0.01
	Stage III	63 (87.5)	28 (68.3)	
RAS/BRAF status	RAS/BRAF wild-type	35 (49.3)	21 (51.2)	0.23
	RAS mutant	35 (49.3)	17 (41.5)	
	BRAF mutant	1 (1.4)	3 (7.3)	
MSI status	MSI-High	2 (2.8)	2 (4.9)	0.57
	MSS	69 (97.2)	39 (95.1)	

**The p-values are calculated using the two-sided chi-square test that compares the distribution of the factors between the two columns (ACT vs Observation) with no correction for multiplicity.

Supplementary Table 3. Clearance Cohort: Baseline characteristics of patients with post-surgical ctDNA positive result (4-week) who either received or did not receive adjuvant chemotherapy

Patient Characteristics		Adjuvant chemotherapy N=92 (50.5%)	No adjuvant chemotherapy (observation) N=90 (49.5%)	P-value*
Age	Median (range)	67 (39-85)	68 (42-88)	-
	≤ 70	60 (65.2)	51 (56.7)	0.23
	>70 years old	32 (34.8)	39 (43.3)	
Sex	Male	49 (53.2)	65 (72.2)	0.008
	Female	43 (46.8)	25 (27.8)	
ECOG PS	0	85 (92.4)	75 (83.3)	0.06
	1	7 (7.6)	15 (16.7)	
Primary location	Right-sided colon	33 (35.8)	19 (21.6)	0.001
	Left-sided colon	56 (61.0)	53 (60.2)	
	Rectum	3 (3.2)	16 (18.2)	
Pathological T stage	T1-2	5 (6.0)	1 (2.0)	0.26
	T3-4	78 (94.0)	51 (98.0)	
Pathological N stage	N0	14 (16.8)	16 (30.8)	0.058
	N1-2	69 (83.2)	36 (69.2)	
Pathological stage	Stage I	0 (0)	1 (1.1)	

	Stage II	9 (9.8)	14 (15.6)	<0.001
	Stage III	63 (68.5)	27 (30.0)	
	Stage IV or recurrence	20 (21.7)	48 (53.3)	
RAS/BRAF status	RAS/BRAF wild-type	46 (50.6)	46 (51.7)	0.65
	RAS mutant	43 (47.2)	39 (43.8)	
	BRAF mutant	2 (2.2)	4 (4.5)	
MSI status	MSI-High	2 (2.2)	3 (3.4)	0.63
	MSS	89 (97.8)	86 (96.6)	

**The p-values are calculated using the two-sided chi-square test that compares the distribution of the factors between the two columns (ACT vs Observation) with no correction for multiplicity.