

Supplementary Materials: Progressive Oncological Surgery Is Associated with Increased Curative Resection Rates and Improved Survival in Metastatic Colorectal Cancer

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Table S1. Demographic, clinical and pathological characteristics of all patients.

Variable	2003–2006 <i>n</i> = 146	2007–2010 <i>n</i> = 142	2011–2014 <i>n</i> = 132	<i>p</i> - value *
Age at stage IV diagnosis: Mean (SD)	66.7 (11.1)	68.2 (11.5)	68.2 (12.1)	0.403†
BMI: Mean (SD)	25.5 (4.2)	25.5 (4.2)	25.0 (4.6)	0.550†
Sex: Male	100 (69%)	84 (59%)	78 (59%)	0.168
ASA				
- 1	13 (9%)	15 (11%)	6 (5%)	0.530
- 2	71 (49.0%)	65 (46%)	70 (53%)	
- 3	52 (36%)	55 (39%)	47 (36%)	
- 4	9 (6%)	6 (4%)	9 (7%)	
- 5	0 (0%)	1 (1%)	0 (0%)	
Primary TU Location				0.677
- Colon	86 (59%)	89 (63%)	84 (64%)	
- Rectum	59 (40%)	51 (36%)	45 (34%)	
- Both	1 (1%)	2 (1%)	3 (2%)	
Primary TU UICC Stage				0.603
- I	6 (4%)	5 (4%)	6 (5%)	
- II	14 (10%)	13 (9%)	9 (7%)	
- III	42 (29%)	29 (20%)	29 (22%)	
- IV	84 (58%)	95 (67%)	88 (67%)	
Timing of metastasis: synchronous (6 months)	93 (64%)	96 (68%)	91 (69%)	0.624
CEA at stage IV (mean; ng/ml)	277.6 (915)	218.6 (622)	267.6 (1002)	0.846†
Initial metastatic site				
- Hepatic	108 (74%)	104 (73%)	96 (73%)	0.972
- Pulmonary	35 (24%)	47 (33%)	50 (38%)	0.039
- Hepatic + Pulmonary	19 (13%)	22 (16%)	26 (20%)	0.295
- Peritoneal	29 (20%)	28 (20%)	27 (21%)	0.987
- Distant lymph nodes	19 (13%)	12 (9%)	6 (5%)	0.046
- Others	14 (10%)	12 (9%)	13 (10%)	0.913

* χ^2 or Fisher's exact test, except †ANOVA. ASA = American Society of Anaesthesiologists; BMI = Body mass index; CEA = carcinoembryogenic antigen; SD = standard deviation.

Table S2. Data on chemotherapy for A) all patients B) palliative patients (PAT) group.

Variable	2003–2006 <i>n</i> = 146	2007–2010 <i>n</i> = 142	2011–2014 <i>n</i> = 132	<i>p</i> -value *
(A) Chemotherapy in whole cohort (% of all patients)				
Chemotherapy received since first diagnosis of metastasis	113 (79%)	120 (85%)	108 (82%)	0.487
- Number of CTX cycles (months) received: mean (range)	10.0 (0–31)	9.5 (0–31)	7.9 (0–33)	0.055†
Type of CTX scheme				

- 5-FU-Mono based	26 (19%)	43 (31%)	37 (28%)	0.077
- Oxaliplatin / Irinotecan based dual (CAPOX, FOLFOX, XELIRI, FOLFIRI)	34 (25%)	39 (28%)	29 (22%)	0.040
- None	31 (23%)	45 (32%)	52 (39%)	
- One agent	71 (52%)	58 (41%)	51 (39%)	
- Both agents (sequentially)	0 (0%)	2 (1%)	3 (2%)	0.231
- Oxaliplatin / Irinotecan based triple (FOLFOXIRI)	73 (54%)	95 (67%)	81 (61%)	0.077
- Biological included (Bevacizumab, Panitumumab, Cetuximab, Tivozanib, Matuzumab)	0 (0%)	9 (6%)	27 (21%)	<0.001
- Other agents (Aflibercept, Regorafenib, Mitomycin C, TAS 102/Lonsurf, Phase I study agents)				
(B) Chemotherapy in palliative patients (% of PAT Patients)	n = 104	n = 86	n = 60	p-value
Chemotherapy received since first diagnosis of metastasis (<i>missing n=2</i>)	76 (75%)	68 (79%)	46 (77%)	0.763
- Number of CTX cycles (months) received: mean (range)	9.5 (0–28)	9.6 (0–31)	6.7 (0–30)	0.071†
Type of CTX scheme				
- 5-FU-Mono based	15 (15%)	31 (36%)	16 (27%)	0.005
- Oxaliplatin / Irinotecan based dual (CAPOX, FOLFOX, XELIRI, FOLFIRI)	27 (28%)	28 (33%)	18 (30%)	0.303
- None	18 (18%)	22 (26%)	18 (30%)	
- One agent	53 (54%)	36 (42%)	24 (40%)	
- Both agents (sequentially)	0 (0.0%)	0 (0%)	0 (0%)	-
- Oxaliplatin / Irinotecan based triple (FOLFOXIRI)	52 (53%)	57 (66%)	35 (58%)	0.190
- Biological included (Bevacizumab, Panitumumab, Cetuximab, Tivozanib, Matuzumab)	0 (0%)	7 (8%)	16 (27%)	<0.001
- Other agents (Aflibercept, Regorafenib, Mitomycin C, TAS 102/Lonsurf, Phase I study agents)				

* χ^2 or Fisher's exact test, except †ANOVA; CAPOX = Capecitabine / Oxaliplatin; CTX=chemotherapy; 5-FU = 5-Fluorouracil; FOLFOX = Folinic acid / 5-FU / Oxaliplatin; FOLFIRI = Folinic acid / 5-FU / Irinotecan; FOLFOXIRI = Folinic acid, 5-FU, Oxaliplatin and Irinotecan; LA = lymphadenectomy of distant lymph nodes; abd. organs = other abdominal organs; VATS = video assisted thorascopic surgery; XELIRI = Capecitabine / Irinotecan. .

Table S3. Excel sheet with anonymized patient data used for this study. (See attached file).



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