

Pre-operative factors	Univariate			Multivariable		
	Odds ratio	95% CI	P-value	Odds Ratio	95% CI	P-value
Age (continuous, years)	1.00	(1.00-1.00)	0.077	1.00	(0.99-1.00)	0.340
BMI (continuous, per increasing kg/m ²)	1.01	(1.00-1.01)	0.053	1.01	(0.98-1.01)	0.200
Distance tumour to ARJ (continuous, centimetre)	1.00	(0.99-1.00)	0.322	1.00	(0.99-1.01)	0.375
Tumour diameter (continuous, centimetre)	1.00	(1.00-1.00)	0.066	1.00	(1.00-1.00)	0.054
Neoadjuvant therapy (yes vs. no)	1.06	(1.00-1.12)	0.040	1.06	(1.00-1.12)	0.064
ASA 3-4 classification (yes vs. no)	1.15	(1.07-1.23)	<0.001	1.14	(1.05-1.22)	<0.001

Table 1. Univariate and multivariable linear regression analysis of pre-operative factors predicting for total costs (adjusted for right skew by log transformation), Abbreviations: BMI, body mass index; CI, confidence interval; ASA, American Society of Anaesthesiologists; ARJ, Anorectal Junction

		TaTME one-team	TaTME two-team	p-value
n		73	124	
Age, years		66.01 (9.74)	64.89 (10.93)	0.468
Sex	Male	54 (74)	82 (66)	0.322
	Female	19 (26)	42 (34)	
BMI		25.51 (4.38)	26.38 (4.27)	0.173
ASA-score	1	14 (19)	24 (19)	0.441
	2	48 (66)	76 (61)	
	3	10 (14)	24 (19)	
	4	1 (1)	0 (0)	
Tumour distance from ARJ, cm		4 [2; 6]	4 [2; 6]	0.525
pT-stage	T1	4 (5.5)	4 (3)	0.656
	T2	17 (23.3)	38 (31)	
	T3	47 (64)	75 (61)	
	T4	4 (6)	6 (5)	
	Tx	1 (1)	1 (1)	
Procedure	APR	6 (8)	18 (15)	0.506
	Hartmann	7 (10)	24 (19)	
	LAR + anastomosis	60 (82)	82 (66)	
Neoadjuvant therapy		45 (62)	79 (64)	0.891
	Radiotherapy	24 (33)	35 (28)	0.603
	Chemo radiation	21 (29)	44 (36)	0.603
	Chemotherapy	10 (14)	19 (15)	0.918
Construction of stoma	No stoma	29 (40)	31 (25)	0.030
	Deviating ileostomy	31 (43)	54 (44)	
	Deviating colostomy	1 (1)	0 (0)	
	Permanent stoma	12 (16)	39 (31)	
OK time, minutes		236 [198; 284]	170 [137; 226]	<0.001
Conversion		3 (4)	2 (2)	0.544
Surgical complication		21 (29)	40 (32)	0.725
Clavien Dindo \geq 3		16 (22)	33 (27)	0.572
Anastomotic leakage		9 (15)	18 (22)	0.428
30-day re-intervention		13 (18)	29 (23)	0.457
30-day readmission		14 (19)	17 (14)	0.415
ICU admission		3 (4)	5 (4)	1.000
ICU stay*, days		5 [4; 7]	4 [3; 39]	1.000
Length of stay, days		6 [4; 9]	7 [4; 11]	0.602
Operative costs, €		10,170 [8,935; 11,280]	8,867 [7,479; 10,402]	0.002
Hospitalization costs, €		2,929 [2,092; 4,603]	2,929 [2,092; 5,440]	0.578
Complication costs*, €		2,376 (1,504)	2,493 (2,084)	0.857
Total costs, €		13,328 [12,169; 16,587]	12,620 [10,702; 15,994]	0.044

*Table 2. TaTME sub-analysis. All variables are in mean (SD), median [IQR] or number (%). Abbreviations: APR: abdominoperineal resection, ASA: American Society of Anaesthesiologists, BMI: body mass index, ICU: Intensive Care Unit, IQR: interquartile range, LAR: low anterior resection, pT-stage: pathological T-stage, SD: standard deviation, TaTME: transanal total mesorectal excision, * = if occurred*