

Supplementary Table 1. Individual patient information

Patient no.	Operation type	Sex	Age (yr)	BMI (kg/m ²)	Preoperative CEA (ng/ml)	Tumor height ^a (cm)	nCRT	EMV ^b	MRF ^b	Anastomosis	OP time (min)	TA time (min)	EBL (mL)	TME quality	Tumor size (mm)	pT category	pN category	Harvest LN	PRM (mm)	DRM (mm)	CRM (mm)	VI	ALI	PI	Intraoperative event
1	TaTME ^c	M	53	25.5	5.8	5.7	Y	Y	Threatened	Colorectal	344	120	50	NC	10	4a	0	14	105	38	5	N	N	N	Purse-string failure
2	TaTME	M	63	22.3	1.8	2	Y	N	Positive	Coloanal	468	250	100	Complete	50	3	1a	23	145	5	1.2	N	N	N	Dissection failure, LLND
3	LapTME	F	47	29.1	2.7	9.6	N	Y	Positive	Colorectal	283	NA	50	Complete	47	3	2b	55	105	28	1.3	Y	Y	N	
4	LapTME	F	58	24.1	4	12.7	N	Y	Negative	Colorectal	179	NA	10	Complete	45	3	0	16	125	23	12	N	N	N	
5	LapTME	M	51	21.3	1.2	7.3	N	Y	Negative	Colorectal	165	NA	10	Complete	25	3	1c	17	92	18	25	N	Y	N	
6	TaTME ^c	M	68	22.6	4.3	1.8	Y	N	Threatened	Coloanal	217	115	80	Complete	4	3	0	16	195	8	8	N	N	N	
7	LapTME ^c	F	54	23.1	3.5	5.8	Y	N	Negative	Colorectal	329	NA	50	Complete	13	1	1a	24	165	10	11	N	Y	N	LLND
8	LapTME ^c	M	62	25.2	2.3	7.4	Y	N	Negative	Colorectal	368	NA	5	Complete	55	3	0	26	140	43	10	Y	N	Y	LLND
9	LapTME	M	65	25.6	2.4	6	Y	N	Positive	Colorectal	366	NA	500	Complete	24	2	0	26	120	18	13	N	N	N	
10	LapTME ^c	M	55	20.7	5.4	5.3	Y	Y	Threatened	Coloanal	337	NA	20	Complete	55	2	0	19	150	10	7	N	N	Y	
11	LapTME	F	64	22	1.5	10	N	N	Negative	Colorectal	226	NA	30	Complete	20	1	0	15	90	15	10	N	N	N	
12	LapTME	M	59	24.1	2.6	3.6	N	N	Negative	Coloanal	243	NA	50	NC	20	2	0	32	156	5	2	Y	Y	N	
13	LapTME	F	73	22	1.5	7.4	N	N	Negative	Colorectal	165	NA	20	Complete	35	3	0	22	92	10	5	N	Y	Y	
14	TaTME ^c	F	46	19.7	1.3	6	Y	N	Negative	Colorectal	422	90	50	Complete	15	2	0	24	146	13	9	N	N	N	LLND
15	LapTME ^c	F	60	26.2	1.7	2.8	Y	N	Negative	Coloanal	299	NA	50	Complete	30	3	1b	12	185	9	1	N	Y	Y	
16	LapTME	F	54	25.8	2.5	5.6	N	N	Negative	Colorectal	373	NA	100	Complete	20	2	1b	45	130	17	9	N	Y	N	LLND
17	TaTME	M	66	24.9	4.2	2	Y	N	Negative	Coloanal	299	40	15	NC	13	2	0	13	153	10	2.5	N	N	N	
18	LapTME	F	84	29.6	1.7	9.3	N	Y	Negative	Colorectal	157	NA	30	Complete	40	3	0	19	85	13	14	N	N	N	
19	TaTME	M	55	30.8	2.7	5.1	Y	N	Threatened	Coloanal	420	110	90	NC	40	3	2a	20	135	12	2	N	Y	Y	
20	TaTME ^c	F	77	23.7	3.6	4.6	Y	N	Threatened	Coloanal	366	94	30	Complete	23	1	0	12	146	11	6	N	N	N	

BMI, body mass index; CEA, carcinoembryonic antigen; nCRT, neoadjuvant chemoradiotherapy; EMV, extramural vascular invasion; MRF, mesorectal fascia; OP, operation; TA, transanal; EBL, estimated blood loss; TME, total mesorectal excision; p, pathological; LN, lymph node; PRM, proximal resection margin; DRM, distal resection margin; CRM, circumferential resection margin; VI, venous invasion; ALI, angiolymphatic invasion; PI, perineural invasion; TaTME, transanal total mesorectal excision; M, male; Y, yes; NC, nearly complete; N, no; LLND, lateral lymph node dissection; LapTME, laparoscopic total mesorectal excision; F, female; NA, not applicable.

^aFrom the anal verge. ^bMagnetic resonance imaging result before surgery (reevaluated results for patients who received nCRT). ^cAs patients enrolled in randomized controlled trial, COLOR (Colorectal Cancer Laparoscopic or Open Resection) III, surgical methods were randomly assigned.