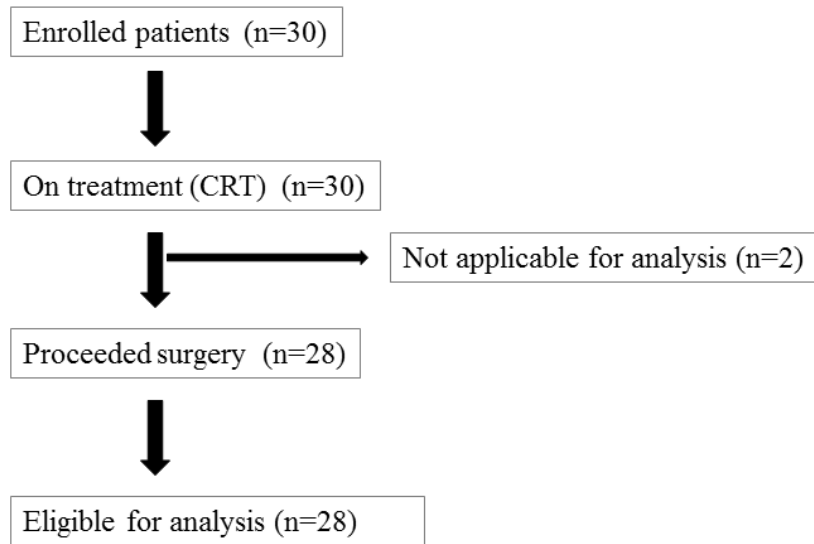


## Supplementary File

Figure S1.



**Table S1.****Clinicopathological findings in 28 eligible patients for analysis**

Characteristic		Number of patients (n=28)	%
Age (Years)	Median	66	
	Range	40-77	
Gender	Male	20	71
	Female	8	29
PS	0	13	46
	1	15	54
Tumor location*	Ra	3	11
	Rb	23	82
	Rbp	2	7
Tumor size (cm)	Median	4.3	
	Range	1.9-10.4	
cT factor*	cT3	19	68
	cT4a	4	14
	cT4b	5	18
cStage*	II	12	43
	III	16	57
	IV	0	0
Operations (number of Lap/Open)	sLAR	6 (6/0)	21
	taTME	6 (4/2)	21
	ISR	7 (7/0)	25
	APR	6 (3/3)	21
	TPE	3 (0/3)	11
Surgical curability**	A	27	96
	B	0	0
	C	1	4
Histology	Tub 1,2	25	89
	Muc	3	11

PS : performance status, sLAR : super low anterior resection,

taTME : transanal total mesorectal excision, ISR : intersphincteric resection,

APR : abdominoperineal resection, TPE : total pelvic exenteration,

Lap : laparoscopic surgery, Open : open abdominal surgery,

Tub : tubular adenocarcinoma, Muc : mucinous adenocarcinoma

\*: using the tumor-node-metastasis (TNM) classification system (UICC 6th edition)

\*\* : A; no residual tumor, C; macroscopic residual tumor, B; neither A nor C

**Table S2.**

Received benefit for preoperative chemoradiotherapy with S-1

<b>Recived benefit</b>	<b>Number of patients (n)</b>	<b>%</b>
Improvement of anal pain	7/7	100
Improvement of melena	12/12	100
Sphincgter presurving surgery		
Ra~Rbp	20/28	71
Rb~Rbp	14/25	56
Rb~Rbp/cT4	4/9	44

Ra: rectum located above the peritoneal reflection, Rb: rectum located below the peritoneal reflection, and Rbp: rectum (Rb) to anal canal, cT4: tumor wall invasion beyond the serosa before CRT

**Table S3.**

Postoperative complications  
in advanced low rectal cancer patients (n = 28)

Postoperative complication	total number	G1	G2	G3	G4	total	%	G2≤	%	G3+4	%
retroperitoneal space infection	28	1	3	0	0	4	14	3	11	0	0
intestinal leakage	22	1	1	1	0	3	14	2	7	1	4
urological leakage	3	1	0	0	0	1	33	0	0	0	0
ileus	28	0	0	1	0	1	4	1	4	1	4
pneumodema	20	1	0	0	0	1	5	0	0	0	0
high-output stoma	17	1	0	0	0	1	6	0	0	0	0
hypoalbuminemia	28	10	15	2	0	27	96	17	61	2	7
hyperbilirubinemia	28	2	2	0	0	4	14	2	7	0	0
hypercreatininemia	28	0	0	1	0	1	4	1	4	1	4
transaminitis	28	4	0	0	0	4	14	0	0	0	0
leukopenia	28	2	0	0	0	2	7	0	0	0	0
anemia	28	15	7	1	0	23	82	8	29	1	4
thrombocytopenia	28	4	0	0	0	4	14	0	0	0	0