

Supplementary Table S1

Table S1 Gene expression profiling of immune response-associated genes in CRT-treated rectal cancers

ProbeName	Gene Symbol	p value	Regulation	FC
A_23_P71037	IL6	0.0190	up	11.8
A_24_P250922	PTGS2	0.0239	up	8.2
A_21_P0000178	TREM1	0.0269	up	7.6
A_23_P389897	NGFR	0.0052	up	7.3
A_33_P3344831	TMEM45A	0.0017	up	6.5
A_33_P3363804	NCAM1 (CD56)	0.0259	up	6.5
A_33_P3214159	CDH2	0.0225	up	6.0
A_23_P88404	TGFB3	0.0033	up	5.2
A_23_P92499	TLR2	0.0217	up	4.9
A_33_P3241021	CD69	0.0401	up	4.6
A_23_P152838	CCL5	0.0483	up	4.1
A_33_P3410659	CLEC12B	0.0234	up	4.1
A_24_P193093	KLRK1 (CD314, NKG2D)	0.0421	up	4.0
A_24_P218979	CDCA3	0.0332	down	-5.5
A_23_P120281	EDAR	0.0382	down	-5.5
A_24_P157370	IL17RB	0.0069	down	-8.9
A_23_P49155	CDH3	0.0049	down	-12.4
A_23_P206359	CDH1	0.0042	down	-24.9

Supplementary Table S2

Table S2 Upregulated and downregulated genes after CRT in SCC820 cancer-associated gene panel

ProbeName	GeneSymbol	p value	Regulation	FC
A_33_P3257027	FGF7	0.00016	up	10.4
A_33_P3246985	PDE4DIP	0.00072	up	7.6
A_33_P3333982	PDE4DIP	0.00192	up	7.0
A_24_P410610	DPYD	0.00150	up	5.3
A_33_P3276713	HGF	0.00030	up	4.6
A_33_P3332362	POU2F2	0.00180	up	4.5
A_23_P500861	SYNE1	0.00139	up	4.2
A_23_P71624	PAX5	0.00026	up	4.0
A_23_P24031	TLX1	0.00206	down	-4.5
A_33_P3385775	(ZFP 703)	0.00017	down	-5.1
A_23_P148015	AXIN2	0.00032	down	-7.2
A_24_P416346	ETV4	0.00175	down	-9.2
A_23_P215956	MYC	2.72E-07	down	-16.6
A_32_P164246	FOXQ1	0.00035	down	-26.9
A_32_P8221	GRM8	0.00328	down	-27.6

Supplementary Table S3

Comparison of TIL numbers inside the tumor nest between CRT-treated and not-treated rectal cancers

					No.1-8 CRT (+)
					No.9-16 CRT (-)
Case No.	PD-L1	CD4 (n/5 HPF)	CD8 (n/5 HPF)	FOX-P3 (n/5 HPF)	CD204 (n/5 HPF)
1	0	31	77	8	20
2	0	2	73	15	14
3	0	88	237	48	57
4	1	14	72	2	29
5	5	0	57	13	25
6	0	1	124	0	27
7	0	14	208	25	34
8	20	7	11	7	34
9	0	24	218	19	20
10	0	42	199	7	21
11	0	8	299	2	12
12	10	14	71	4	20
13	0	191	15	0	11
14	0	71	54	2	11
15	5	1	0	6	8
16	10	28	24	25	6
<i>P</i> value (t-test)	0.9668	0.5446	0.9575	0.2511	0.0058*
mean (CRT+)	3.3	19.6	107.4	14.7	30.0
SD (CRT+)	6.5	27.5	72.8	14.6	12.1
mean (CRT-)	3.1	47.4	110.0	8.1	13.7
SD (CRT-)	4.3	58.0	105.2	8.4	5.4

Five areas of tumor at a high magnification (x200) in each section stained with various antibodies were used for TIL counting. TIL numbers per area were compared between CRT-treated and non-treated rectal cancers. * : $P < 0.01$. SD; standard deviation. FFPE specimen was not available in REC-009 case.