

## A rank-based transcriptional signature for predicting relapse risk of stage II colorectal cancer identified with proper data sources

### Supplementary Material

Supplementary Table S1: Description of the six CRC datasets contained stage II CRC

without CTX

GEO Accession	Platforms	Stage II CTX CRC#	Stage II no CTX CRC#
GSE24550	GPL5175	--	44
GSE30378	GPL5175	0	52
GSE31595	GPL570	0	20
GSE17536	GPL570	0	57
GSE14333	GPL570	22	72
GSE39582	GPL570	56	203

**Abbreviations:** -- means not available. CTX, the patients with completely resected tumors who received adjuvant chemotherapy. No CTX, the patients with completely resected tumors who did not receive any adjuvant chemotherapy.

**Supplementary Table S2: The 15 prognosis-associated gene pairs**

<b>Id</b>	<b>Gene a</b>	<b>Gene b</b>
1	ORC1	OLR1
2	FBXO9	MTNR1A
3	RFX5	MMP14
4	MTNR1A	VGLL1
5	DLGAP1-AS2	CHSY3
6	SUV39H2	OLR1
7	FXN	ANGPTL4
8	DANCR	VKORC1
9	SUV39H2	FIBIN
10	TRAF3	COLEC12
11	SLC12A2	AZIN1
12	TROVE2	ZC3H12A
13	GSG2	OLR1
14	LRRC40	THBS3
15	RSPO3	SCAI

**Note:** all the  $E_a < E_b$  REOs was associated with poor patient survival.

**Supplementary Table S3: The GSP of the risk of relapse on stage II CRC**

<b>Gene A</b>	<b>Gene B</b>	<b>Beta coefficients</b>	<b>Log-rank <math>p</math> value</b>
ORC1	OLR1	1.355	$3.5 \times 10^{-4}$
MTNR1A	VGLL1	1.074	$7.4 \times 10^{-4}$
RFX5	MMP14	1.152	$3.7 \times 10^{-4}$

Note: all the  $E_a < E_b$  REOs was associated with poor patient survival.