

**Table S1** The sequencing depth statistics of all samples

Sample_ID	Total_ Target_Base	Mapped_ Target_Base	Average_ Target_Depth	Total_Near_ Target_Base	Mapped_Near_ Target_Base	Average_Near_ Target_Depth	Near_Target_ Coverage_ratio(%)	Target_ Coverage_ratio(%)	Target_ Coverage_5x (%)	Target_ Coverage_10x(%)	Target_ Coverage_20x (%)	Target_ Coverage_50x (%)	Target_ Coverage_100x (%)
CRC01LM	60456963	7.53E+09	124.61	76180188	1.18E+09	15.5	54.82	98.62	93.1	82.98	62.69	36.9	26.33
CRC01control	60456963	1.32E+10	217.98	76180188	2.11E+09	27.76	65.91	99.04	96.21	91.73	83.56	70.36	58.34
CRC01tumor	60456963	6.09E+09	100.72	76180188	1.06E+09	13.94	66.66	99.31	98.57	97.58	94.85	79.46	42.28
CRC02tumor	60456963	5.95E+09	98.45	76180188	9.84E+08	12.91	62.93	99.32	98.52	97.4	94.24	77.21	40.3
CRC02control	60456963	7.37E+09	121.84	76180188	1.21E+09	15.88	65.84	99.4	98.79	97.99	95.88	84.11	53.57
CRC02LM	60456963	7.16E+09	118.47	76180188	1.21E+09	15.86	66.13	99.44	98.81	97.98	95.76	83.92	52.85
CRC03control	60456963	6.45E+09	106.63	76180188	1.12E+09	14.69	66.54	99.32	98.58	97.62	95.07	81.41	46.62
CRC03tumor	60456963	6.33E+09	104.7	76180188	1.07E+09	14.04	64.73	99.23	98.41	97.35	94.49	79.37	44.27
CRC03LM	60456963	6.54E+09	108.2	76180188	1.11E+09	14.62	65.8	99.32	98.61	97.67	95.14	81.5	47.38
CRC04LM	60456963	7.28E+09	120.41	76180188	1.23E+09	16.09	67.06	99.24	98.6	97.83	95.74	84.42	53.57
CRC04control	60456963	7.47E+09	123.57	76180188	1.29E+09	16.92	68.16	99.18	98.53	97.79	95.88	85.92	57.01
CRC04tumor	60456963	8.71E+09	144.14	76180188	1.41E+09	18.51	67.51	99.33	98.85	98.27	96.7	87.69	62

**Table S2** The single nucleotide variants (SNV) and insertions/deletions (InDel) numbers of all samples were counted

Sample name	SNV number	InDel number
CRC01CvsLM	1,094	326
CRC01CvsT	168	9
CRC02CvsT	303	19
CRC02CvsLM	300	17
CRC03CvsT	324	12
CRC03CvsLM	170	8
CRC04CvsLM	266	20
CRC04CvsT	5,940	18