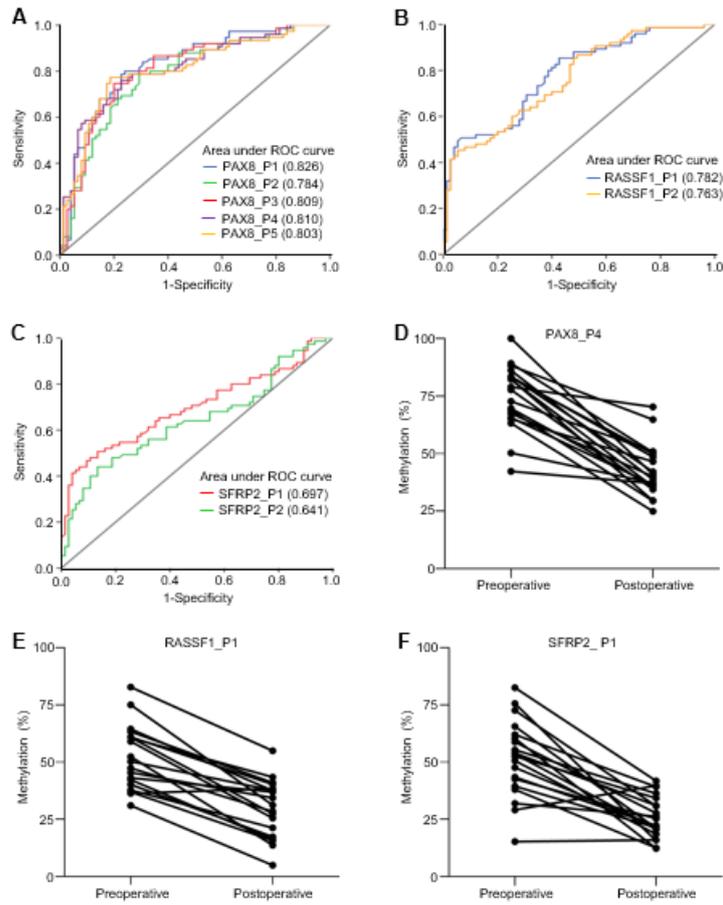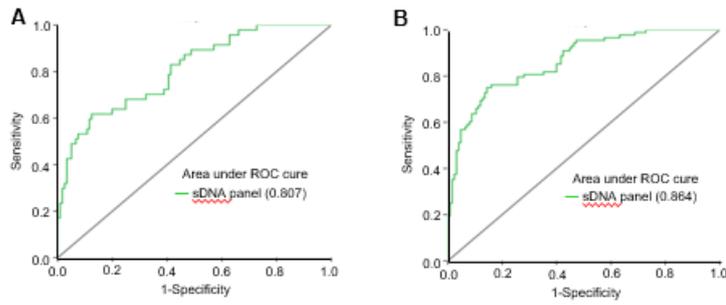**Supplementary Table 1 | Targeted bisulfite sequencing data of five pairs of preoperative and postoperative stool DNA samples**

Sample	Raw bases (G)	Clean reads	Bisulfite conversion (%)	Mapping (%)	CpGs on target	Mean coverage of CpG
HSG_1	12.20	39242028	99.53	90.11	2820970	24.88
HSG_2	12.12	39704701	99.56	92.50	2832983	26.66
HSG_3	11.62	37893462	99.52	91.59	2827996	24.07
HSG_4	11.54	37881393	99.52	91.14	2806776	24.23
HSG_5	10.99	36133827	99.53	94.04	2842040	25.19
CSG_1	11.31	37370132	99.59	92.82	2844677	31.64
CSG_2	12.12	40145037	99.61	93.48	2801002	32.24
CSG_3	11.33	37302078	99.69	86.01	2818877	25.01
CSG_4	10.85	35724002	99.37	91.11	2808809	23.66
CSG_5	9.81	32386751	99.48	92.96	2831774	24.70

CSG and HSG groups: Five pairs of preoperative and postoperative stool DNA samples (from the early-stage colon cancer patients) that were selected for biomarkers discovery using targeted bisulfite sequencing were named CSG and HSG groups, respectively.

Supplementary Figure 1 The evaluation of each candidate biomarker based on pyrosequencing. A: Receiver operating characteristic (ROC) curves comparing five differentially methylated sites (DMSs) of PAX8 for the detection of early-stage colon cancer (ECC) in training set. B: ROC curves comparing two DMSs of RASSF1 for the detection of ECC in training set. C: ROC curves comparing two DMSs of SFRP2 for the detection of ECC in training set. D: Paired line plot of the methylation percentage of PAX8_P4 in 20 pairs of preoperative and postoperative stool DNA (sDNA) samples from ECC patients. E: Paired line plot of the methylation percentage of RASSF1_P1 in 20 pairs of preoperative and postoperative sDNA samples from ECC patients. F: Paired line plot of the methylation percentage of SFRP2_P1 in 20 pairs of preoperative and postoperative sDNA samples from ECC patients.

Supplementary Figure 2 The evaluation of stool DNA panel in subgroup analysis. A: Receiver operating characteristic (ROC) analysis of stool DNA (sDNA) panel for the detection of early-stage colon cancer (ECC) among the 168 subjects with negative fecal immunochemical test. B: ROC analysis of sDNA panel for the detection of ECC among the 213 subjects with negative serum carcinoembryonic antigen.