

**Supplementary Table 1. Multiple logistic regression model fitted in the development group**

Covariate	$\beta$ coefficient	Odds ratio	95% CI	<i>p</i> value
Age group, yr				< 0.001
< 50	1	1		
$\geq 50, < 60$	1.242	3.46	2.91–4.12	
$\geq 60, < 70$	1.864	6.45	5.17–8.06	
$\geq 70$	2.298	9.95	6.33–15.6	
Male sex	0.451	1.57	1.32–1.87	0.001
Current smoker	0.279	1.32	1.14–1.54	0.001
Family history of CRC	0.050	1.05	0.76–1.46	0.765
BMI ( $\geq 25$ kg/m <sup>2</sup> )	0.266	1.30	1.12–1.51	0.001
Glucose ( $\geq 100$ mg/dL or diabetes)	0.179	1.20	1.02–1.40	0.025
LDL-C ( $\geq 100$ mg/dL)	0.177	1.19	0.99–1.45	0.069
CEA group, ng/mL				0.001
< 5	1	1		
$\geq 5, < 10$	0.867	2.38	1.59–3.56	
$\geq 10$	2.174	8.79	3.47–22.31	
Constant	-5.405	0.00	0.00–0.01	< 0.001

CI, confidence interval; CRC, colorectal cancer; BMI, body mass index; LDL-C, low-density lipoprotein cholesterol; CEA, carcinoembryonic antigen.