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

| Covariate                          | β coefficient | Odds ratio | 95% CI     | p value |
|------------------------------------|---------------|------------|------------|---------|
| Age group, yr                      |               |            |            | < 0.001 |
| < 50                               | 1             | 1          |            |         |
| ≥ 50, < 60                         | 1.242         | 3.46       | 2.91–4.12  |         |
| ≥ 60, < 70                         | 1.864         | 6.45       | 5.17–8.06  |         |
| ≥ 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 (≥ 25 kg/m²)                   | 0.266         | 1.30       | 1.12–1.51  | 0.001   |
| Glucose (≥ 100 mg/dL or diabetes)  | 0.179         | 1.20       | 1.02–1.40  | 0.025   |
| LDL-C (≥ 100 mg/dL)                | 0.177         | 1.19       | 0.99–1.45  | 0.069   |
| CEA group, ng/mL                   |               |            |            | 0.001   |
| < 5                                | 1             | 1          |            |         |
| ≥ 5, < 10                          | 0.867         | 2.38       | 1.59–3.56  |         |
| ≥ 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.