

Supplementary Table 1 Disease prevalence stratified by risk score optimal cutoff value in screening patients *n* (%)

	< 3.6 (<i>n</i> = 302)	≥ 3.6 (<i>n</i> = 304)	Total (<i>n</i> = 606)	<i>P</i> value
Adenoma present	94 (31.1)	153 (50.3)	247 (40.8)	< 0.001
Adenoma (number)				< 0.001
< 3	288 (95.4)	265 (87.2)	553 (91.3)	
≥ 3	14 (4.6)	39 (12.8)	53 (8.7)	

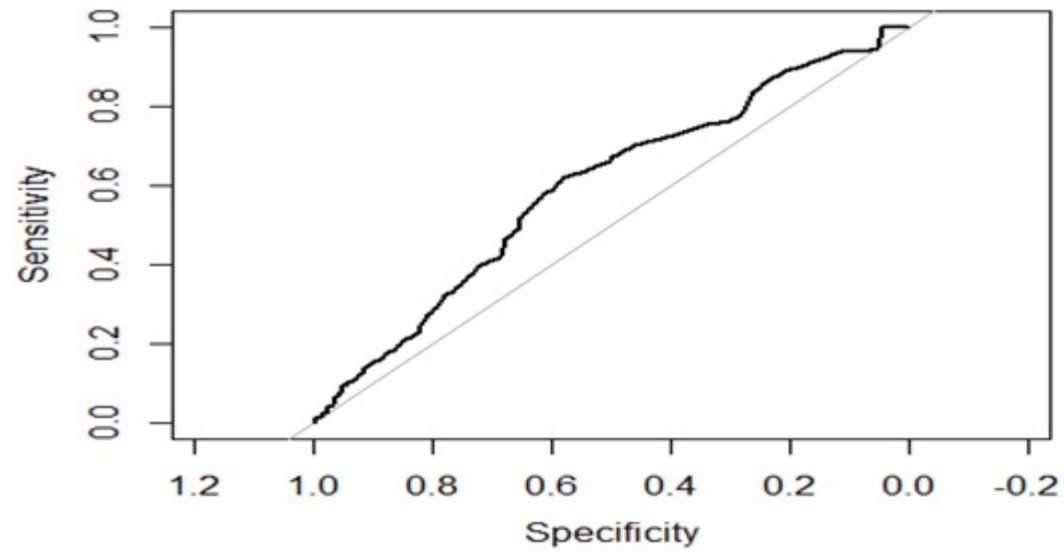
Supplementary Table 2 Adenoma prevalence by risk-score quintile for surveillance patients

OR of an adenoma (95%CI): Row quintile <i>vs</i> Column quintile						
NCI lifetime risk score quintile	Score range	Number of individuals with adenomas (%)	Q1	Q2	Q3	Q4
Q1 lowest	(1.1, 1.9)	7 (23.33%)	–	–	–	–
Q2	(1.9, 2.8)	10 (33.33%)	1.64 (0.53, 5.12)	–	–	–
Q3	(2.8, 4)	17 (56.67%)	4.3 (1.41, 13.07)	2.62 (0.92, 7.46)	–	–
Q4	(4, 5.26)	12 (50.00%)	3.29 (1.03, 10.53)	2 (0.66, 6.03)	0.76 (0.26, 2.25)	–
Q5 highest	(5.26, 11.9)	20 (68.97%)	7.3 (2.3, 23.18)	4.44 (1.49, 13.26)	1.7 (0.58, 4.94)	2.22 (0.72, 6.83)

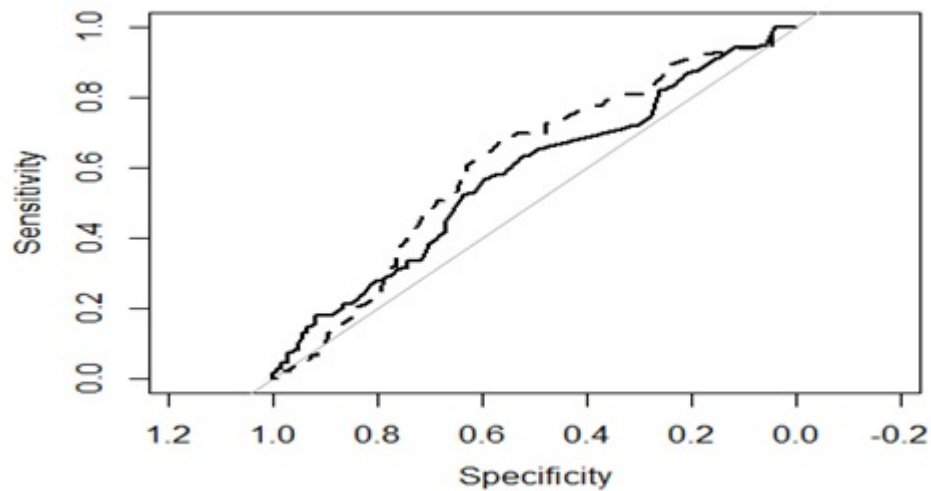
Asymptotic Linear-by-Linear Association Test: $P < 0.001$.

Supplementary Table 3 Diseases prevalence stratified by risk score optimal cutoff value in surveillance patients *n* (%)

	< 3.5 (<i>n</i> = 71)	≥ 3.5 (<i>n</i> = 72)	Total (<i>n</i> = 143)	<i>P</i> value
Adenoma present	21 (29.6)	45 (62.5)	66 (46.2)	< 0.001
Adenoma (number)				0.009
< 3	67 (94.4)	56 (77.8)	123 (86.0)	
≥ 3	4 (5.6)	16 (22.2)	20 (14.0)	



Supplementary Figure 1 Receiver operating characteristic curves for National Cancer Institute Colorectal Cancer Risk-Assessment Tool for screening patients.



Supplementary Figure 2 Receiver operating characteristic curves for National Cancer Institute Colorectal Cancer Risk-Assessment Tool for follow up patients. Solid line indicates female, dashed line indicates male.