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Supplementary Table 1 Overall ADR in patients of the NBI and 2G-NBI

	1G-NBI group (n = 1147)	2G-NBI group (n = 869)	WLI group (n = 2098)	P† value	RR (95%CI)		P‡ value	RR (95%CI)		P§ value	RR (95%CI)	
ADR	243/1147 (21.2)	235/869 (27.0)	458/2098 (21.8)	0.67	0.97	(0.85- 1.11)	0.01	1.24	(1.08- 1.42)	0.01	0.78	(0.67- 0.92)
Advanced ADR	65/1147 (5.7)	57/869 (6.6)	116/2098 (5.5)	0.87	1.03	(0.76- 1.38)	0.28	1.19	(0.87- 1.61)	0.41	0.86	(0.61- 1.22)
Small ADR	155/1147 (13.5)	149/869 (17.1)	286/2098 (13.6)	0.93	0.99	(0.83- 1.19)	0.01	1.26	(1.05- 1.51)	0.02	0.79	(0.64- 0.97)
ADR in different ages												
< 50 yr	24/309 (7.8)	31/229 (13.5)	54/557 (9.7)	0.34	0.80	(0.51- 1.27)	0.12	1.40	(0.92- 2.11)	0.03	0.57	(0.35- 0.95)
≥ 50 yr	219/838 (26.1)	204/640 (31.9)	404/1541 (26.2)	0.97	1.00	(0.87- 1.45)	0.01	1.22	(1.06- 1.40)	0.02	0.82	(0.70- 0.96)
ADR in different gender												
Male	141/562	129/391	254/982	0.74	0.97	(0.81-	0.01	1.28	(1.07-	0.01	0.76	(0.62-

	(25.1)	(33.0)	(25.9)		1.16)			1.52)			0.93)	
Female	102/585	106/478	204/1116	0.67	0.95	(0.77-	0.07	1.21	(0.99-	0.05	0.79	(0.62-
	(17.4)	(22.2)	(18.3)		1.18)			1.50)			1.00)	
ADR with different indications												
Diagnostic												
< 50 yr	14/167	9/80	23/256	0.83	0.93	(0.49-	0.55	1.25	(0.60-	0.47	0.75	(0.34-
	(8.4)	(11.3)	(9.0)		1.76)			2.60)			1.65)	
≥ 50 yr	95/361	76/229	166/620	0.88	0.98	(0.79-	0.07	1.24	(0.99-	0.07	0.79	(0.62-
	(26.3)	(33.2)	(26.8)		1.22)			1.55)			1.02)	
Surveillance												
< 50 yr	5/63	3/33	7/93	1.00*	1.05	(0.35-	0.78	1.21	(0.33-	1.00*	0.87	(0.22-
	(7.9)	(9.1)	(7.5)		3.18)			4.40)			3.42)	
≥ 50 yr	82/312	52/184	126/508	0.64	1.06	(0.83-	0.36	1.14	(0.87-	0.63	0.93	(0.69-
	(26.3)	(28.3)	(24.8)		1.35)			1.50)			1.25)	
Screening												
< 50 yr	5/79	19/116	24/208	0.19	0.55	(0.22-	0.22	1.42	(0.81-	0.04	0.39	(0.15-

	(6.3)	(16.4)	(11.5)		1.39)		2.48)		0.99)
≥ 50 yr	42/165 (25.5)	76/227 (33.5)	112/413 (27.1)	0.68	0.94 (0.69- 1.27)	0.09	1.24 (0.97- 1.57)	0.09	0.76 (0.55- 1.05)
Withdrawal time	7.82 ± 3.28	8.01 ± 3.66	7.85 ± 3.47	0.53		0.60		0.98	

Dates are n or n (%).

Plus/minus values are means plus/minus s.d.

* Using fisher exact test. † the P value between 1G-NBI group and WLI group. ‡ the P value between 2G-NBI group and WLI group.

§ the P value between 1G-NBI group and 2G-NBI group.

ADR, Adenoma detection rate. RR, Relative risk. NBI, Narrow band imaging. WLI, White light imaging. LCI, Linked color imaging.

Supplementary Table 2 Analysis of all polyps in 1G-NBI and 2G-NBI

	1G-NBI group (n = 1147)	2G-NBI group (n = 869)	WLI group (n = 2098)	P† value	RR (95%CI)	P† value	RR (95%CI)	P§ value	RR (95%CI)
PDR	398/1147 (34.7)	441/869 (50.7)	757/2098 (36.1)	0.43	0.96 (0.87- 1.06)	0.01	1.41 (1.29- 1.53)	0.01	0.68 (0.62- 0.76)
All polyps	606	913	1319						
Inflammatory polyp	84 (13.9)	337 (36.9)	341 (25.9)	0.01	0.54 (0.43- 0.67)	0.01	1.43 (1.26- 1.62)	0.01	0.38 (0.30- 0.47)
Hyperplastic polyp	71 (11.7)	93 (10.2)	150 (11.4)	0.83	1.03 (0.79- 1.34)	0.38	0.90 (0.70- 1.14)	0.35	1.15 (0.86- 1.54)
Adenoma polyp	322 (53.1)	325 (35.6)	590 (44.7)	0.01	1.19 (1.08- 1.31)	0.01	0.80 (0.72- 0.89)	0.01	1.49 (1.33- 1.67)
Sessile adenoma	5 (0.8)	5 (0.5)	11 (0.8)	0.98	0.98 (0.35- 2.84)	0.43	0.66 (0.23- 1.88)	0.53*	1.51 (0.44- 5.18)
Chronic inflammation	113 (18.6)	146 (16.0)	211 (16.0)	0.15	1.17 (0.95- 1.43)	1.00	1.00 (0.82- 1.21)	0.18	1.17 (0.93- 1.46)

Cancer		9 (1.5)	4 (0.4)	13 (1.0)	0.34	1.51 (0.65-3.51)	0.14	0.45 (0.15-1.36)	0.03	3.39 (1.05-10.96)
Others		2 (0.3)	3 (0.3)	3 (0.2)	0.65*	1.45 (0.24-8.66)	0.69*	1.45 (0.29-7.14)	1.00	1.00 (0.17-5.99)
Adenoma colonoscopy	per	0.28 ± 0.63	± 0.37 ± 0.42	0.28 ± 0.62	± 0.77		0.01		0.01	
Adenoma polyp		322	325	590						
Size										
≤ 5 mm		172 (53.4)	143 (44.0)	294 (49.8)	0.30	1.07 (0.94-1.22)	0.09	0.88 (0.76-1.02)	0.02	1.21 (1.04-1.42)
6-9 mm		81 (25.2)	115 (35.4)	163 (27.6)	0.42	0.91 (0.72-1.15)	0.02	1.28 (1.05-1.56)	0.01	0.71 (0.56-0.90)
≥ 10 mm		69 (21.4)	67 (20.6)	133 (22.5)	0.70	0.95 (0.74-1.23)	0.50	0.92 (0.71-1.19)	0.80	1.04 (0.77-1.40)
Shape										
Pedunculated		48 (14.9)	20 (6.2)	76 (12.9)	0.39	1.16 (0.83-1.62)	0.01	0.48 (0.30-0.77)	0.01	2.42 (1.47-3.99)

Subpedunculated	71 (22.0)	103 (31.7)	154 (26.1)	0.18	0.85	(0.66-	0.07	1.21	(0.99-	0.01	0.70	(0.54-
					1.08)			1.50)			0.90)	
Flat	203 (63.0)	202 (62.2)	360 (61.0)	0.55	1.03	(0.93-	0.74	1.02	(0.92-	0.82	1.01	(0.90-
					1.15)			1.13)			1.14)	
Pathology												
Tubular adenoma	311 (96.6)	316 (97.2)	569 (96.4)	0.91	1.00	(0.98-	0.52	1.01	(0.98-	0.64	0.99	(0.97-
					1.03)			1.03)			1.02)	
Tubulovillous adenoma	9 (2.8)	9 (2.8)	19 (3.2)	0.72	0.87	(0.40-	0.71	0.86	(0.39-	0.98	1.01	(0.41-
					1.90)			1.88)			2.51)	
Villous adenoma	2 (0.6)	0 (0)	2 (0.3)	0.62*	1.83	(0.26-	0.54*			0.25*		
					12.95)							
Site												
Left	128 (39.8)	118 (36.3)	236 (40.0)	0.94	0.99	(0.84-	0.27	0.91	(0.76-	0.37	1.10	(0.90-
					1.17)			1.08)			1.33)	
Right	155 (48.1)	175 (53.8)	299 (50.7)	0.46	0.95	(0.83-	0.36	1.06	(0.94-	0.15	0.89	(0.77-
					1.09)			1.21)			1.04)	
Rectum	39 (12.1)	32 (9.8)	55 (9.3)	0.19	1.30	(0.88-	0.80	1.06	(0.70-	0.36	1.23	(0.79-

1.91)

1.60)

1.91)

Dates are n or n (%).

Plus/minus values are means plus/minus s.d.

* Using fisher exact test. † the P value between 1G-NBI group and WLI group. ‡ the P value between 2G-NBI group and WLI group.

§ the P value between 1G-NBI group and 2G-NBI group.

Others in 1G-NBI group: gland hyperplasia*1, fibroepithelial polyp*1; Others in 2G-NBI group: dermatofibroma*1, neuroendocrine tumor*1, soft fibroma*1.

Others in WLI group: neuroendocrine tumor*1, lymphoid polyps*1, inflammatory granulation tissue*1.

ADR, Adenoma detection rate. RR, Relative risk. NBI, Narrow band imaging. WLI, White light imaging. LCI, Linked color imaging.

Supplementary Table 3 Baseline characteristics (ITT)

	IEE group (<i>n</i> = 2140)	WLI group (<i>n</i> = 2141)
Age (yr)	56.65 ± 12.93	56.75 ± 13.08
Male gender	1020 (50.3)	1006 (49.7)
BMI (kg/m ²)	23.42 ± 3.20	23.50 ± 3.17
Comorbidities		
ASA1	1495 (69.9)	1546 (72.2)
ASA2	640 (29.9)	585 (27.3)
ASA3	5 (0.2)	10 (0.5)
Colorectal surgery history	154 (7.2)	139 (6.5)
Colonoscopy indication		
Diagnostic	895 (41.8)	896 (41.8)
Surveillance	622 (29.1)	613 (28.6)
Screening	623 (29.1)	632 (29.5)
Colonoscopy history	906 (42.3)	897 (41.9)

Date are n or n (%).

Supplementary Table 4 Overall ADR in patients of the two groups (ITT)

	IEE group (<i>n</i> = 2140)	WLI group (<i>n</i> = 2141)	P value	Relative risk (95%CI)
ADR	508/2140 (23.7)	458/2141 (21.4)	0.07	1.11 (0.99-1.24)
Advanced ADR	127/2140 (5.9)	116/2141 (5.4)	0.47	1.10 (0.86-1.40)
Small ADR	323/2140 (15.1)	286/2141 (13.4)	0.10	1.13 (0.98-1.31)
ADR in different ages				
< 50 yr	67/595 (11.3)	54/570 (9.5)	0.32	1.19 (0.85-1.67)
≥ 50 yr	441/1545 (28.5)	404/1571 (25.7)	0.08	1.11 (0.99-1.25)
ADR in different gender				
Male	288/1020 (28.2)	254/1006 (25.2)	0.13	1.12 (0.97-1.29)
Female	220/1120 (19.6)	204/1135 (18.0)	0.31	1.09 (0.92-1.30)
ADR with different indications				
Diagnostic				
< 50 yr	26/275 (9.5)	23/261 (8.8)	0.80	1.07 (0.63-1.83)
≥ 50 yr	179/620 (28.9)	166/635 (26.1)	0.28	1.10 (0.92-1.32)
Surveillance				
< 50 yr	9/106 (8.5)	7/96 (7.3)	0.75	1.29 (0.50-3.33)

≥ 50 yr	138/516 (26.7)	126/517 (24.4)	0.38	1.10 (0.89-1.35)
Screening				
< 50 yr	32/214 (15.0)	24/213 (11.3)	0.26	1.33 (0.81-2.18)
≥ 50 yr	124/409 (30.3)	112/419 (26.7)	0.25	1.13 (0.91-1.41)
Withdrawal time	7.90 ± 3.42	7.85 ± 3.47	0.30	

Data are n or n (%).

Plus/minus values are means plus/minus s.d.

ADR, Adenoma detection rate. IEE, image-enhanced endoscopy. WLI, White light imaging.

|| Because of the withdrawal time of the ITT being lack, it was same as the withdrawal time of per protocol.

Supplementary Table 5 All polyps analysis (ITT)

	IEE group (n = 2140)	WLI group (n = 2141)	P value	Relative risk (95%CI)
PDR	882/2140 (41.2)	757/2141 (35.4)	0.01	1.17 (1.08-1.26)
All polyps	1588	1319		
Inflammatory polyp	426 (26.8)	341 (25.8)	0.55	1.04 (0.92-1.17)
Hyperplastic polyp	179 (11.3)	150 (11.4)	0.93	0.99 (0.81-1.22)
Adenoma polyp	690 (43.4)	590 (44.7)	0.49	0.97 (0.90-1.06)
Sessile serrated adenoma	10 (0.6)	11 (0.8)	0.52	0.76 (0.32-1.77)
Chronic inflammation	262 (16.5)	211 (16.0)	0.72	1.03 (0.87-1.22)
Cancer	16 (1.0)	13 (1.0)	0.95	1.02 (0.49-2.12)
others	5 (0.3)	3 (0.2)	0.74*	1.38 (0.33-5.78)
Adenoma per colonoscopy	0.32 ± 0.68	0.28 ± 0.61	0.04	
Adenoma polyp	690	590		
Size			0.44	
≤ 5 mm	338 (49.0)	294 (49.8)		0.98 (0.88-1.10)
6-9 mm	211 (30.6)	163 (27.6)		1.11 (0.93-1.32)
≥ 10 mm	141 (20.4)	133 (22.5)		0.91 (0.74-1.12)

Shape			0.39
Pedunculated	72 (10.4)	76 (12.9)	0.81 (0.60-1.10)
Subpedunculated	186 (27.0)	154 (26.1)	1.03 (0.86-1.24)
Flat	432 (62.6)	360 (61.0)	1.03 (0.94-1.12)
Pathology			0.80
Tubular adenoma	670 (97.1)	569 (96.4)	1.01 (0.99-1.03)
Tubulovillous adenoma	18 (2.6)	19 (3.2)	0.81 (0.43-1.53)
Villous adenoma	2 (0.3)	2 (0.3)	0.86 (0.12-6.05)
Site			0.50
Left	258 (37.4)	236 (40.0)	0.94 (0.81-1.07)
Right	357 (51.7)	299 (50.7)	1.02 (0.92-1.14)
Rectum	75 (10.9)	55 (9.3)	1.17 (0.84-1.62)

Date are n or n (%).

Plus/minus values are means plus/minus s.d.

* Using fisher exact test.

PDR, Polyp detection rate. IEE, image-enhanced endoscopy. WLI, White light imaging.

Others in IEE group: dermatofibroma*1, fibroepithelial polyp*1, neuroendocrine tumor*1, soft fibroma*1, gland hyperplasia*1.

Others in WLI group: neuroendocrine tumor*1, lymphoid polyps*1, inflammatory granulation tissue*1.

Supplementary Table 6 Overall ADR in patients of the subgroup (ITT)

	NBI group (n = 2038)	LCI group (n = 102)	WLI group (n = 2141)	P†	RR (95%CI)	P‡	RR (95%CI)	P§	RR (95%CI)
				value		value		value	
ADR	478/2038 (23.5)	30/102 (29.4)	458/2141 (21.4)	0.11	1.10 (0.98- 1.23)	0.06	1.38 (1.01- 1.88)	0.17	0.80 (0.58- 1.09)
Advanced ADR	122/2038 (6.0)	5/102 (4.9)	116/2141 (5.4)	0.43	1.11 (0.86- 1.41)	0.82	0.91 (0.38- 2.17)	0.65	1.22 (0.51- 2.92)
Small ADR	304/2038 (14.9)	19/102 (18.6)	286/2141 (13.4)	0.15	1.12 (0.96- 1.30)	0.13	1.39 (0.92- 2.12)	0.31	0.80 (0.53- 1.22)
ADR in different ages									
< 50 yr	55/543 (10.1)	12/52 (23.1)	54/570 (9.5)	0.71	1.07 (0.75- 1.53)	0.01	2.44 (1.40- 4.25)	0.01	0.44 (0.25- 0.77)
≥ 50 yr	423/1495 (28.3)	18/50 (36.0)	404/1571 (25.7)	0.11	1.10 (0.98- 1.24)	0.10	1.40 (0.96- 2.05)	0.24	0.79 (0.54- 1.15)
ADR in different gender									
Male	270/966	18/54	254/1006	0.18	1.11 (0.96-	0.19	1.32 (0.89-	0.39	0.84 (0.57-

	(28.0)	(33.3)	(25.2)		1.28)			1.95)			1.24)	
Female	208/1072	12/48	204/1135	0.39	1.08	(0.91-	0.22	1.39	(0.84-	0.34	0.78	(0.47-
	(19.4)	(25.0)	(18.0)		1.29)			2.31)			1.29)	
ADR with different indications												
Diagnostic												
< 50 yr	23/249	3/26	23/261	0.87	1.05	(0.60-	0.72*	1.31	(0.42-	0.72*	0.80	(0.26-
	(9.2)	(11.5)	(8.8)		1.82)			4.07)			2.49)	
≥ 50 yr	171/599	8/21	166/635	0.34	1.09	(0.91-	0.22	1.46	(0.83-	0.34	0.75	(0.43-
	(28.5)	(38.1)	(26.1)		1.31)			2.55)			1.31)	
Surveillance												
< 50 yr	8/98	1/8	7/96	0.82	1.12	(0.42-	0.49*	1.71	(0.24-	0.52*	0.65	(0.09-
	(8.2)	(12.5)	(7.3)		2.97)			12.26)			4.59)	
≥ 50 yr	134/503	4/13	126/517	0.41	1.09	(0.89-	0.53*	1.26	(0.55-	0.75*	0.87	(0.38-
	(26.6)	(30.8)	(24.4)		1.35)			2.89)			1.98)	
Screening												
< 50 yr	24/196	8/18	24/213	0.76	1.09	(0.64-	0.01*	3.94	(2.08-	0.01*	0.28	(0.15-

	(12.2)	(44.4)	(11.3)		1.85)		7.48)		0.52)			
≥ 50 yr	118/393	6/16	112/419	0.30	1.12	(0.90-	0.39*	1.40	(0.73-	0.58*	0.80	(0.42-
	(30.0)	(37.5)	(26.7)		1.40)			2.69)			1.53)	
Withdrawal time	7.90	± 7.82	± 7.85	± 0.47			0.02			0.05		
	3.46	2.67	3.47									

Date are n or n (%).

Plus/minus values are means plus/minus s.d.

* Using fisher exact test. † the P value between NBI group and WLI group. ‡ the P value between LCI group and WLI group. § the P value between NBI group and LCI group.

ADR, Adenoma detection rate. RR, Relative risk. NBI, Narrow band imaging. WLI, White light imaging. LCI, Linked color imaging.

|| Because of the withdrawal time of the ITT being lack, it was same as the withdrawal time of per protocol.

Supplementary Table 7 Subgroup analysis of all polyps (ITT)

	NBI	LCI	WLI	P†	RR (95%CI)	P†	RR (95%CI)	P§	RR (95%CI)
	group (n	group	group (n	value		value		value	
	= 2038)	(n = 102)	= 2141)						
PDR	839/2038 (41.2)	43/102 (42.2)	757/2141 (35.4)	0.01	1.16 (1.08- 1.26)	0.16	1.19 (0.94- 1.51)	0.84	0.98 (0.77- 1.23)
All polyps	1519	69	1319						
Inflammatory polyp	421 (27.7)	5 (7.2)	341 (25.9)	0.26	1.07 (0.95- 1.21)	0.01	0.28 (0.12- 0.66)	0.01	3.83 (1.64- 8.93)
Hyperplastic polyp	164 (10.8)	15 (21.7)	150 (11.4)	0.63	0.95 (0.77- 1.17)	0.01	1.91 (1.19- 3.07)	0.01	0.50 (0.31- 0.80)
Adenoma polyp	647 (42.6)	43 (62.3)	590 (44.7)	0.25	0.95 (0.88- 1.04)	0.01	1.39 (1.15- 1.69)	0.01	0.68 (0.56- 0.83)
Sessile adenoma	10 (0.7)	0 (0)	11 (0.8)	0.59	0.79 (0.34- 1.85)	1.00*		1.00*	
Chronic inflammation	259 (17.1)	3 (4.3)	211 (16.0)	0.45	1.07 (0.90- 1.26)	0.01	0.27 (0.09- 0.83)	0.01	3.92 (1.29- 11.93)

Cancer		13 (0.9)	3 (4.3)	13 (1.0)	0.72	0.87 (0.40-1.87)	0.04*	4.41 (1.29-15.12)	0.03*	0.20 (0.06-0.68)
Others		5 (0.3)	0 (0)	3 (0.2)	0.73*	1.45 (0.35-6.04)	1.00*		1.00*	
Adenoma	per	0.32	± 0.42	± 0.28	± 0.08		0.05		0.16	
colonoscopy		0.67	0.85	0.61						
Adenoma polyp		647	43	590						
Size					0.56		0.22		0.33	
≤ 5 mm		315 (48.7)	23 (53.5)	294 (49.8)		0.98 (0.87-1.09)		1.07 (0.80-1.44)		0.91 (0.68-1.22)
6-9 mm		196 (30.3)	15 (34.9)	163 (27.6)		1.10 (0.92-1.31)		1.26 (0.82-1.94)		0.87 (0.57-1.33)
≥ 10 mm		136 (21.0)	5 (11.6)	133 (22.5)		0.93 (0.76-1.15)		0.52 (0.22-1.19)		1.81 (0.78-4.18)
Shape					0.43		0.79		1.00*	
Pedunculated		68 (10.5)	4 (9.3)	76 (12.9)		0.82 (0.60-1.11)		0.72 (0.28-1.88)		1.13 (0.43-2.95)

Subpedunculated	174 (26.9)	12 (27.9)	154 (26.1)	1.03 1.24)	(0.86-	1.07 1.76)	(0.65-	0.96 1.58)	(0.59-
Flat	405 (62.6)	27 (62.8)	360 (61.0)	1.03 1.12)	(0.94-	1.03 1.31)	(0.81-	1.00 1.26)	(0.79-
Pathology				0.90		0.68*		0.67	
Tubular adenoma	627 (96.9)	43 (100)	569 (96.4)	1.01 1.03)	(0.98-				
Tubulovillous adenoma	18 (2.8)	0 (0)	19 (3.2)	0.86 1.63)	(0.46-				
Villous adenoma	2 (0.3)	0 (0)	2 (0.3)	0.91 6.45)	(0.13-				
Site				0.57		0.29*		0.31	
Left	246 (38.0)	12 (27.9)	236 (40.0)	0.95 1.09)	(0.83-	0.70 1.14)	(0.43-	1.36 2.23)	(0.83-
Right	330 (51.0)	27 (62.8)	299 (50.7)	1.01 1.12)	(0.90-	1.24 1.58)	(0.97-	0.81 1.04)	(0.64-
Rectum	71 (11.0)	4 (9.3)	55 (9.3)	1.18	(0.84-	1.00	(0.38-	1.18	(0.45-

1.64)

2.62)

3.08)

Data are n or n (%).

Plus/minus values are means plus/minus s.d.

* Using Fisher exact test. † the P value between NBI group and WLI group. ‡ the P value between LCI group and WLI group. § the P value between NBI group and LCI group.

PDR, Polyp detection rate. RR, Relative risk. NBI, Narrow band imaging. WLI, White light imaging. LCI, Linked color imaging.

Others in NBI group: dermatofibroma*1, fibroepithelial polyp*1, neuroendocrine tumor*1, soft fibroma*1, gland hyperplasia*1.

Others in WLI group: neuroendocrine tumor*1, lymphoid polyps*1, inflammatory granulation tissue*1.

Supplementary Table 8 Overall ADR in patients of the 1G-NBI and 2G-NBI (ITT)

	1G-NBI (n = 1165)	2G-NBI (n = 873)	WLI group (n = 2141)	P† value	RR (95%CI)		P‡ value	RR (95%CI)		P§ value	RR (95%CI)	
ADR	243/1165 (20.9)	235/873 (26.9)	458/2141 (21.4)	0.72	0.98	(0.85- 1.12)	0.01	1.26	(1.10- 1.44)	0.01	0.78	(0.66- 0.91)
Advanced ADR	65/1165 (5.6)	57/873 (6.5)	116/2141 (5.4)	0.85	1.03	(0.77- 1.38)	0.23	1.21	(0.89- 1.64)	0.37	0.86	(0.61- 1.21)
Small ADR	155/1165 (13.3)	149/873 (17.1)	286/2141 (13.4)	0.97	1.00	(0.83- 1.20)	0.01	1.28	(1.07- 1.54)	0.02	0.78	(0.63- 0.96)
ADR in different ages												
< 50 yr	24/314 (7.6)	31/229 (13.5)	54/570 (9.5)	0.36	0.81	(0.51- 1.28)	0.09	1.43	(0.94- 2.16)	0.03	0.57	(0.34- 0.94)
≥ 50 yr	219/851 (25.7)	204/644 (31.7)	404/1571 (25.7)	0.99	1.00	(0.87- 1.15)	0.01	1.23	(1.07- 1.42)	0.01	0.81	(0.69- 0.95)
ADR in different gender												
Male	141/574	129/392	254/1006	0.76	0.97	(0.81-	0.01	1.30	(1.09-	0.01	0.75	(0.61-

	(24.6)	(32.9)	(25.2)		1.16)			1.56)			0.91)	
Female	102/591	106/481	204/1135	0.71	0.96	(0.77-	0.06	1.23	(0.99-	0.05	0.78	(0.61-
	(17.3)	(22.0)	(18.0)		1.19)			1.51)			1.00)	
ADR with different indications												
Diagnostic												
< 50 yr	14/169	9/80	23/261	0.85	0.94	(0.50-	0.51	1.28	(0.62-	0.45	0.74	(0.33-
	(8.3)	(11.3)	(8.8)		1.78)			2.65)			1.63)	
≥ 50 yr	42/165	76/228	166/635	0.86	0.97	(0.73-	0.04	1.28	(1.02-	0.09	0.76	(0.56-
	(25.5)	(33.3)	(26.1)		1.30)			1.60)			1.05)	
Surveillance												
< 50 yr	5/65	3/33	7/96	1.00*	1.06	(0.35-	0.72	1.25	(0.34-	1.00*	0.85	(0.22-
	(7.7)	(9.1)	(7.3)		3.18)			4.55)			3.33)	
≥ 50 yr	82/319	52/184	126/517	0.67	1.06	(0.83-	0.30	1.16	(0.88-	0.53	0.91	(0.68-
	(25.7)	(28.3)	(24.4)		1.34)			1.53)			1.22)	
Screening												
< 50 yr	5/80	19/116	24/213	0.20	0.56	(0.22-	0.19	1.45	(0.83-	0.03	0.38	(0.15-

	(6.3)	(16.4)	(11.3)		1.40)		2.54)		0.98)			
≥ 50 yr	42/165	76/228	112/419	0.75	0.95	(0.70-	0.08	1.25	(0.98-	0.09	0.76	(0.56-
	(25.5)	(33.3)	(26.7)		1.29)			1.59)			1.05)	
Withdrawal time	0.28	± 0.37	± 0.28	±								
	0.63	0.42	0.62	0.77								

Dates are n or n (%).

Plus/minus values are means plus/minus s.d.

* Using fisher exact test. † the P value between 1G-NBI group and WLI group. ‡ the P value between 2G-NBI group and WLI group.

§ the P value between 1G-NBI group and 2G-NBI group.

| | Because of the withdrawal time of the ITT being lack, it was same as the withdrawal time of per protocol.

PDR, Polyp detection rate. RR, Relative risk. NBI, Narrow band imaging. WLI, White light imaging. LCI, Linked color imaging.

Supplementary Table 9 Analysis of all polyps in 1G-NBI and 2G-NBI (ITT)

	1G-NBI (n = 1165)	2G-NBI (n = 873)	WLI group (n = 2098)	P† value	RR (95%CI)	P‡ value	RR (95%CI)	P§ value	RR (95%CI)
PDR	398/1165 (34.2)	441/873 (50.5)	757/2141 (35.4)	0.49	0.97 (0.88-1.07)	0.01	1.43 (1.31-1.56)	0.01	0.68 (0.61-0.75)
All polyps	606	913	1319						
Inflammatory polyp	84 (13.9)	337 (36.9)	341 (25.9)	0.01	0.54 (0.43-0.67)	0.01	0.54 (0.43-0.67)	0.01	0.38 (0.30-0.47)
Hyperplastic polyp	71 (11.7)	93 (10.2)	150 (11.4)	0.83	1.03 (0.79-1.34)	0.83	1.03 (0.79-1.34)	0.35	1.15 (0.86-1.54)
Adenoma polyp	322 (53.1)	325 (35.6)	590 (44.7)	0.01	1.19 (1.08-1.31)	0.01	1.19 (1.08-1.31)	0.01	1.49 (1.33-1.67)
Sessile serrated adenoma	5 (0.8)	5 (0.5)	11 (0.8)	0.98	0.99 (0.35-2.84)	0.98	0.99 (0.35-2.84)	0.53*	1.51 (0.44-5.18)
Chronic inflammation	113 (18.6)	146 (16.0)	211 (16.0)	0.15	1.17 (0.95-1.43)	0.15	1.17 (0.95-1.43)	0.18	1.17 (0.93-1.46)

Cancer		9 (1.5)	4 (0.4)	13 (1.0)	0.34	1.51 (0.65-3.51)	0.34	1.51 (0.65-3.51)	0.03	3.39 (1.05-10.96)
Others		2 (0.3)	3 (0.3)	3 (0.2)	0.65*	1.45 (0.24-8.66)	0.65*	1.45 (0.24-8.67)	1.00*	1.00 (0.17-5.99)
Adenoma colonoscopy	per	0.28 ± 0.63	± 0.37 ± 0.72	0.28 ± 0.61	± 0.77		0.01		0.01	
Adenoma polyp		322	325	590						
Size										
≤ 5 mm		172 (53.4)	143 (44.0)	294 (49.8)	0.30	1.07 (0.94-1.22)	0.91	0.88 (0.76-1.02)	0.02	1.21 (1.04-1.42)
6-9 mm		81 (25.2)	115 (35.4)	163 (27.6)	0.42	0.91 (0.72-1.14)	0.02	1.28 (1.05-1.56)	0.01	0.71 (0.56-0.90)
≥ 10 mm		69 (21.4)	67 (20.6)	133 (22.5)	0.70	0.95 (0.74-1.23)	0.50	0.92 (0.71-1.19)	0.80	1.04 (0.77-1.40)
Shape										
Pedunculated		48 (14.9)	20 (6.2)	76 (12.9)	0.39	1.16 (0.83-1.62)	0.01	0.48 (0.30-0.77)	0.01	2.42 (1.47-3.99)

Subpedunculated	71 (22.0)	103 (31.7)	154 (26.1)	0.18	0.85	(0.66-	0.07	1.21	(0.99-	0.01	0.70	(0.54-
					1.08)			1.50)			0.90)	
Flat	203 (63.0)	202 (62.2)	360 (61.0)	0.55	1.03	(0.93-	0.74	1.02	(0.92-	0.82	1.01	(0.90-
					1.15)			1.13)			1.14)	
Pathology												
Tubular adenoma	311 (96.6)	316 (97.2)	569 (96.4)	0.91	1.00	(0.98-	0.52	1.01	(0.98-	0.64	0.99	(0.97-
					1.03)			1.03)			1.02)	
Tubulovillous adenoma	9 (2.8)	9 (2.8)	19 (3.2)	0.72	0.87	(0.40-	0.71	0.86	(0.39-	0.98	1.01	(0.41-
					1.90)			1.88)			2.51)	
Villous adenoma	2 (0.6)	0 (0)	2 (0.3)	0.62*	1.83	(0.26-	0.54*			0.25*		
					12.95)							
Site												
Left	128 (39.8)	118 (36.3)	236 (40.0)	0.94	0.99	(0.84-	0.27	0.91	(0.76-	0.37	1.10	(0.90-
					1.17)			1.08)			1.33)	
Right	155 (48.1)	175 (53.8)	299 (50.7)	0.46	0.95	(0.83-	0.36	1.06	(0.94-	0.15	0.89	(0.77-
					1.09)			1.21)			1.04)	
Rectum	39 (12.1)	32 (9.8)	55 (9.3)	0.19	1.30	(0.88-	0.80	1.06	(0.70-	0.36	1.23	(0.79-

1.91)

1.60)

1.91)

Dates are n or n (%).

Plus/minus values are means plus/minus s.d.

* Using fisher exact test. † the P value between 1G-NBI group and WLI group. ‡ the P value between 2G-NBI group and WLI group.

§ the P value between 1G-NBI group and 2G-NBI group.

Others in NBI group: gland hyperplasia*1, fibroepithelial polyp*1; Others in 2G-NBI group: dermatofibroma*1, neuroendocrine tumor*1, soft fibroma*1.

Others in WLI group: neuroendocrine tumor*1, lymphoid polyps*1, inflammatory granulation tissue*1.

PDR, Polyp detection rate. RR, Relative risk. NBI, Narrow band imaging. WLI, White light imaging. LCI, Linked color imaging.

Supplementary Table 10 Clinical details of sessile serrated lesions

Patient	Gender	Age	Site	Shape	Endoscopic systems
1	Female	63	Right	Flat	WLI
2	Male	76	Left	Flat	WLI
3	Female	78	Right	Flat	WLI
3	Female	78	Right	Flat	WLI
4	Female	76	Right	Subpedunculated	2G-NBI
5	Female	74	Rectum	Flat	2G-NBI
6	Male	69	Rectum	Flat	WLI
6	Male	69	Rectum	Flat	WLI
7	Female	75	Rectum	Flat	2G-NBI
18	Male	69	Rectum	Subpedunculated	1G-NBI
9	Female	69	Right	Subpedunculated	2G-NBI
10	Female	54	Left	Pedunculated	1G-NBI
11	Female	67	Left	Subpedunculated	1G-NBI
12	Female	64	Rectum	Pedunculated	WLI
13	Male	58	Right	Flat	WLI
13	Female	80	Right	Flat	WLI

14	Female	51	Right	Subpedunculated	WLI
15	Male	71	Right	Pedunculated	1G-NBI
16	Female	39	Rectum	Flat	1G-NBI
17	Male	71	Right	Pedunculated	WLI
18	Female	67	Left	Pedunculated	2G-NBI
