

## Supplementary material

**Supplementary Table 1** Proportion of SSL diagnosed among lesions in which OD criteria for SSL were identified, overall and depending on other lesion characteristics.

Optical criteria identification (n = 85)	Overall	Lesions ultimately diagnosed with SSL											
		NICE type 1	NICE type 2	1–5 mm	6–9 mm	≥ 10 mm	Proximal	Distal					
	N (%)	n/N (%)	n/N (%)	n/N (%)	n/N (%)	n/N (%)	n/N (%)	n/N (%)	n/N (%)	n/N (%)	n/N (%)	n/N (%)	n/N (%)
Cloud-like appearance + irregular shape (n = 15)	3/15 (20.0)	2/5 (40.0)	1/8 (12.5)	0/2 -	1/6 (16.7)	2/7 (50.0)	3/11 (27.3)	0 -	0 -	0 -	0 -	0 -	0 -
Cloud-like appearance + indistinct borders (n = 8)	5/8 (62.5)	5/7 (71.4)	0/1 -	0/2 -	4/5 (80.0)	1/1 (100)	5/8 (62.5)	4 -	4 -	4 -	4 -	4 -	4 -
Cloud-like appearance + black dots (n = 4)	0 -	0/3 -	0 -	0/3 -	0/1 -	0 -	0/3 -	0 -	0 -	0 -	0 -	0 -	0 -
Irregular shape + indistinct borders (n = 3)	0 -	0/2 -	0/1 -	0/2 -	0 -	0/1 -	0/3 -	1 -	1 -	1 -	1 -	1 -	1 -
Indistinct borders + black dots (n = 1)	0 -	0/1 -	0 -	0/1 -	-	-	0/3 -	0 -	0 -	0 -	0 -	0 -	0 -
Irregular shape + black dots (n = 2)	0 -	0/1 -	0/1 -	0 -	0/1 -	0/1 -	0/2 -	1 -	1 -	1 -	1 -	1 -	1 -
Cloud-like appearance + irregular shape + indistinct borders (n = 27)	9/27 (33.3)	4/13 (30.8)	5/14 (35.7)	4/17 (23.5)	4/5 (80.0)	1/5 (20.0)	7/18 (38.9)	2/9 (22.2)	2/9 (22.2)	2/9 (22.2)	2/9 (22.2)	2/9 (22.2)	2/9 (22.2)

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Cloud-like appearance + irregular shape + black dots (n = 4)	0	-	0/2	-	0/2	-	0	-	0/3	-	0/1	-	0/3	-	0	-
Irregular shape + indistinct borders + black dots (n = 1)	0	-	0	-	0	-	0	-	0	-	0/1	-	0/1	-	1	-
Cloud-like appearance + irregular shape + indistinct borders + black dots (n = 20)	9/20	(45.0)	8/13	(61.5)	1/7	(14.3)	1/8	(12.5)	1/4	(25.0)	7/8	(87.5)	9/14	(64.3)	0	-
Total	26	(30.6)	19/4	(41.3)	7/31	(22.6)	5/35	(14.3)	10/2	(40.0)	11/2	(42.3)	24/6	(38.8)	2	(12.5)
			6					5			6		7		1	
															1	
															6	

OD, optical diagnosis;

NICE, NBI International Colorectal Endoscopic Classification.

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Supplementary Table 2 Performance measures for optical diagnosis.

	N	Accuracy	S	E	PPV	NPV	LR+
Examiner 1	388	94.6 (92.8–96.4)	9.5 (7.1–11.8)	99.5 (98.9–100)	50.0 (46.0–54.0)	95.0 (93.3–96.7)	17.5 (9.0–33.7)
Examiner 2	228	83.8 (80.8–86.7)	44.4 (40.4–48.4)	87.1 (84.4–89.8)	22.9 (19.5–26.3)	94.8 (93.0–96.6)	3.5 (2.8–4.3)
Examiner 3	248	92.7 (90.6–94.8)	0	95.8 (94.2–97.4)	0	96.6 (95.1–98.0)	0
Examiner 4	304	93.7 (91.8–95.6)	40.0 (36.1–43.9)	97.5 (96.2–98.7)	53.3 (49.3–57.3)	95.8 (94.2–97.4)	16.2 (11.9–22.2)
Examiner 5	228	92.5 (90.4–94.6)	66.7 (62.9–70.5)	94.0 (92.1–95.9)	38.1 (34.2–42.0)	98.1 (97.0–99.2)	11.1 (8.8–13.9)
Expert	570	94.4 (92.6–96.2)	26.2 (22.7–29.7)	97.3 (96.0–98.6)	28.6 (25.0–32.2)	96.9 (95.5–98.3)	9.5 (7.1–12.7)

S, sensitivity; E, specificity; PPV, positive predictive value; NPV, negative predictive value; LR+, positive likelihood ratio.