Supplementary Table S1: Model performance on the classification of EGD images. AUC is area under the receiver operating characteristics curve calculated on the test set.

Region	AUC	Region	AUC
Esophage	0.995	**Lower body (G)**	0.944
Gastroesophageal junction	0.986	**Lower body (P)**	0.982
Fundus (G)	0.991	**Lower body (A)**	0.968
Fundus (P)	0.988	**Lower body (L)**	0.979
Fundus (A)	0.990	**Angulus (R, P)**	0.996
Fundus (L)	0.993	**Angulus (R, A)**	0.994
Middle-upper (G)	0.991	**Angulus (R, L)**	0.993
Middle-upper (P)	0.985	**Antrum (G)**	0.988
Middle-upper (A)	0.973	**Antrum (P)**	0.981
Middle-upper (L)	0.979	**Antrum (A)**	0.969
Middle-upper body (R, P)	0.967	**Antrum (L)**	0.991
Middle-upper body (R, A)	0.969	**Duodenal bulb**	0.999
Middle-upper body (R, L)	0.989	**Duodenal descending**	1.000
Mean AUC		0.984	
Overall Accuracy		98.0%	

Supplementary Table S2: Comparison of pre- and post-training results for the EndoAdd trained endoscopists (Doctor No.1-No.4)

	Dr No.1			Dr No.2			Dr No.3			Dr No.4		
	Practice n=192	**Testing n=48**	**p**	**Practice n=204**	**Testing n=53**	**p**	**Practice n=209**	**Testing n=53**	**p**	**Practice n=184**	**Testing n=50**	**p**
Training Phase Score （30-point scale）		27			28			24			23	
Inspection time Mean±SD)	6.33±1.36	5.85±1.41	**0.032**	6.30±1.45	5.79±1.61	**0.028**	6.23±1.45	5.62±1.65	**0.016**	6.36±1.51	5.80±1.37	**0.013**
Blind Spot n, range)	4.51±2.95	2.08±3.10	**<0.01**	4.37±2.69	2.100±2.93	**<0.01**	4.07±2.96	2.36±3.187	**<0.01**	3.35±2.48	1.54±1.88	**<0.01**
Photo documentation completeness (n%, range)	56 (22, 84)	71 (29, 91)	**<0.01**	56 (23, 84)	74 (18, 92)	**<0.01**	58 (13, 84)	72 (20, 90)	**<0.01**	60 (31, 88)	76 (36, 92)	**<0.01**
Biopsy	33.85	52.08	**0.020**	30.39	47.17	**0.020**	38.76	49.69	0.170	35.87	48.00	0.120
Esophage	0.00	0.00	1.000	0.00	0.00	1.000	0.00	0.00	1.000	0.00	0.00	1.000
Gastroesophageal junction	1.04	0.00	0.480	0.00	1.89	0.050	0.48	0.00	0.610	0.00	0.00	1.000
Fundus (G)	3.65	0.00	0.180	5.39	1.89	0.280	4.78	1.89	0.350	2.72	0.00	0.240
Fundus (P)	16.67	2.08	**0.010**	10.29	3.77	0.140	8.61	5.66	0.480	7.07	10.00	0.490
Fundus (A)	6.77	0.00	0.060	6.86	0.00	0.050	5.26	0.00	0.090	5.98	6.00	1.000
Fundus (L)	9.38	4.17	0.240	7.84	0.00	**0.040**	2.39	3.77	0.580	10.33	8.00	0.620
Middle-upper (G)	9.38	4.17	0.240	14.71	3.77	**0.030**	5.26	1.89	0.290	10.33	2.00	0.060
Middle-upper (P)	31.77	25.00	0.360	31.86	15.09	**0.020**	30.14	20.75	0.180	26.63	16.00	0.120
Middle-upper (A)	41.15	16.67	**<0.01**	40.69	16.98	**<0.01**	33.01	20.75	0.080	25.54	2.00	**<0.01**
Middle-upper (L)	30.21	8.33	**<0.01**	32.35	15.09	**0.010**	38.28	15.09	**<0.01**	31.52	12.00	**0.010**
Middle-upper body (R, P)	30.21	10.42	**0.010**	25.00	9.43	**0.010**	17.70	13.21	0.440	5.98	10.00	0.320
Middle-upper body (R, A)	35.42	14.58	**0.010**	30.88	18.87	0.080	29.19	24.53	0.500	24.46	10.00	**0.030**
Middle-upper body (R, L)	23.44	12.50	0.100	23.53	9.43	**0.020**	21.53	9.43	0.050	16.85	4.00	**0.020**
Lower body (G)	21.88	12.50	0.150	20.59	7.55	**0.030**	19.14	11.32	0.180	21.20	8.00	**0.030**
Lower body (P)	16.15	10.42	0.320	18.63	11.32	0.210	17.70	11.32	0.260	17.39	6.00	0.050
Lower body (A)	20.31	8.33	0.050	16.18	9.43	0.220	18.18	11.32	0.230	8.70	4.00	0.270
Lower body (L)	24.48	8.33	**0.010**	24.51	13.21	0.080	27.75	13.21	**0.030**	23.91	4.00	**<0.01**
Angulus (R, P)	51.56	25.00	**<0.01**	44.12	20.75	**<0.01**	44.98	26.42	**0.010**	34.78	18.00	**0.020**
Angulus (R, A)	36.98	27.08	0.200	38.24	24.53	0.060	38.28	20.75	**0.020**	32.07	24.00	0.270
Angulus (R, L)	14.58	8.33	0.260	16.18	3.77	**0.020**	14.83	15.09	0.960	10.33	8.00	0.620
Antrum (G)	8.33	4.17	0.330	5.88	1.89	0.240	4.78	1.89	0.350	2.17	0.00	0.290
Antrum (P)	6.77	2.08	0.220	8.33	5.66	0.520	8.13	1.89	0.110	7.61	0.00	**0.040**
Antrum (A)	5.73	2.08	0.300	5.39	1.89	0.280	7.18	3.77	0.370	2.17	2.00	0.940
Antrum (L)	5.21	2.08	0.360	9.31	3.77	0.190	9.57	1.89	0.070	7.07	0.00	0.050
Duodenal bulb	0.00	0.00	1.000	0.00	0.00	1.000	0.00	0.00	1.000	0.00	0.00	1.000
Duodenal descending	0.00	0.00	1.000	0.00	0.00	1.000	0.00	0.00	1.000	0.00	0.00	1.000

Supplementary Table S3: Comparison of pre- and post-training results for the traditional trained endoscopists (Doctor No.5-No.8)

	Dr No.5			Dr No.6			Dr No.7			Dr No.8		
	Practice n=215	**Testing n=58**	**p**	**Practice n=192**	**Testing n=44**	**p**	**Practice n=205**	**Testing n=49**	**p**	**Practice n=199**	**Testing n=45**	**p**
Training Phase Score （30-point scale）		29			26			25			24	
Inspection time Mean±SD)	6.31±1.40	6.16±1.57	0.481	6.42±1.47	5.77±1.41	**0.09**	6.40±1.54	5.76±1.60	0.14	6.43±1.48	5.67±1.45	**<0.01**
Blind Spot n, range)	5.45±2.35	3.90±2.63	**<0.01**	5.23±2.09	3.32±1.90	**<0.01**	5.11±2.31	3.06±1.99	**<0.01**	4.78±2.20	3.56±2.49	**<0.01**
Photo documentation completeness (n%, range)	52 (22, 86)	57 (28, 75)	**0.010**	54 (18, 84)	60 (35, 78)	**<0.01**	52 (18, 79)	60 (40, 70)	**<0.01**	53 (25, 81)	57 (30, 82)	**0.010**
Biopsy	27.90	36.20	0.220	26.56	36.36	0.190	28.78	34.69	0.420	23.11	26.67	0.610
Esophage	0.00	0.00	1.000	0.00	0.00	1.000	0.00	0.00	1.000	0.00	0.00	1.000
Gastroesophageal junction	1.40	0.00	0.370	0.00	0.00	1.000	0.49	0.00	0.620	0.00	0.00	1.000
Fundus (G)	9.30	6.90	0.570	7.81	4.55	0.450	10.24	8.16	0.660	0.50	2.22	0.833
Fundus (P)	10.23	10.34	0.980	13.02	15.91	0.610	16.10	10.20	0.300	11.56	11.11	0.930
Fundus (A)	13.02	8.62	0.360	12.50	13.64	0.840	10.24	2.04	0.070	3.52	2.22	0.660
Fundus (L)	11.16	5.17	0.180	14.06	6.82	0.190	8.78	6.12	0.540	7.04	4.44	0.530
Middle-upper (G)	15.81	8.62	0.170	11.46	20.45	0.110	19.51	6.12	**0.030**	11.06	4.44	0.180
Middle-upper (P)	39.07	27.59	0.110	34.38	27.27	0.370	39.51	22.45	**0.030**	36.18	13.33	**<0.01**
Middle-upper (A)	49.77	25.86	**<0.01**	44.27	27.27	**0.040**	49.27	24.49	**<0.01**	41.21	24.44	**0.040**
Middle-upper (L)	38.60	15.52	**<0.01**	36.46	15.91	**0.010**	37.07	18.37	**0.010**	46.23	20.00	**<0.01**
Middle-upper body (R, P)	27.91	20.69	0.270	30.73	9.09	**<0.01**	17.07	14.29	0.640	18.59	24.44	0.370
Middle-upper body (R, A)	31.63	22.41	0.170	25.00	25.00	1.000	33.17	12.24	**<0.01**	32.16	28.89	0.670
Middle-upper body (R, L)	28.37	18.97	0.150	28.13	25.00	0.680	31.71	20.41	0.120	30.15	20.00	0.170
Lower body (G)	26.98	24.14	0.660	27.60	13.64	0.050	23.90	20.41	0.600	22.61	17.78	0.480
Lower body (P)	23.26	22.41	0.890	23.44	9.09	**0.030**	18.05	12.24	0.330	21.61	17.78	0.570
Lower body (A)	18.60	17.24	0.810	20.83	6.82	**0.030**	21.95	18.37	0.580	12.56	20.00	0.190
Lower body (L)	39.53	27.59	0.090	34.38	22.73	0.140	31.71	16.33	**0.030**	36.18	24.44	0.130
Angulus (R, P)	48.37	44.83	0.630	48.96	31.82	**0.040**	57.07	24.49	**<0.01**	56.78	44.44	0.130
Angulus (R, A)	47.44	31.03	**0.030**	48.96	36.36	0.130	40.49	26.53	0.070	41.71	35.56	0.450
Angulus (R, L)	16.74	13.79	0.590	17.19	13.64	0.570	16.10	18.37	0.700	19.10	8.89	0.100
Antrum (G)	10.70	6.90	0.390	7.29	2.27	0.220	2.93	4.08	0.680	4.52	4.44	0.980
Antrum (P)	11.16	10.34	0.860	11.98	2.27	0.060	7.32	6.12	0.770	7.54	4.44	0.460
Antrum (A)	9.30	12.07	0.530	11.98	2.27	0.060	9.27	6.12	0.480	8.04	6.67	0.760
Antrum (L)	16.28	8.62	0.140	13.02	0.00	**0.010**	8.78	8.16	0.890	9.05	11.11	0.670
Duodenal bulb	0.00	0.00	1.000	0.00	0.00	1.000	0.00	0.00	1.000	0.00	0.00	1.000
Duodenal descending	0.00	0.00	1.000	0.00	0.00	1.000	0.00	0.00	1.000	0.00	0.00	1.000