

Supplementary Table 1 Baseline characteristics of patients in development set and validation set

Variable	Development (<i>n</i> = 4503)	Validation (<i>n</i> = 1126)	<i>P</i> value¹
Bleeding after ESD	269 (6.0)	56 (5.0)	0.224
Age	64 (10)	64 (10)	0.833
Gender			0.369
Female	1047 (23.3)	247 (21.9)	
Male	3456 (76.7)	879 (78.1)	
Hypertension	1211 (26.9)	322 (28.6)	0.267
Diabetes mellitus	804 (17.9)	206 (18.3)	0.764
Liver cirrhosis	80 (1.8)	17 (1.5)	0.626
Chronic kidney disease	253 (5.6)	79 (7.0)	0.087
Aspirin	447 (9.9)	110 (9.8)	0.918
P2Y12RA	161 (3.6)	43 (3.8)	0.763
Warfarin	22 (0.5)	7 (0.6)	0.745
DOAC	28 (0.6)	9 (0.8)	0.651
Cilostazol	40 (0.9)	10 (0.9)	1.000
NSAIDs	24 (0.5)	7 (0.6)	0.893
Preprocedure management of AT			0.231
No indication	3899 (86.6)	970 (86.1)	
Interruption	583 (12.9)	146 (13.0)	
Replacement or heparin bridge	21 (0.5)	10 (0.9)	
Tumor			
Multiple	245 (5.4)	67 (6.0)	0.552
Location			0.447
Upper	355 (7.9)	100 (8.9)	
Middle	1520 (33.8)	365 (32.4)	
Lower	2628 (58.4)	661 (58.7)	
Size [†] , mm	17 (10)	17 (11)	0.334
Undifferentiated type	104 (2.3)	28 (2.5)	0.809
Piecemeal resection	51 (1.1)	17 (1.5)	0.377
Laboratory data			
Albumin ² , g/dL	4.3 (0.3)	4.4 (0.3)	0.160
INR ²	1.0 (0.1)	1.0 (0.1)	0.127

Values are expressed as *n* (%) unless otherwise specified.

¹*P* value calculated using Student's *t*-test for continuous variables or Pearson's chi-

square test for categorical variables for overall data.

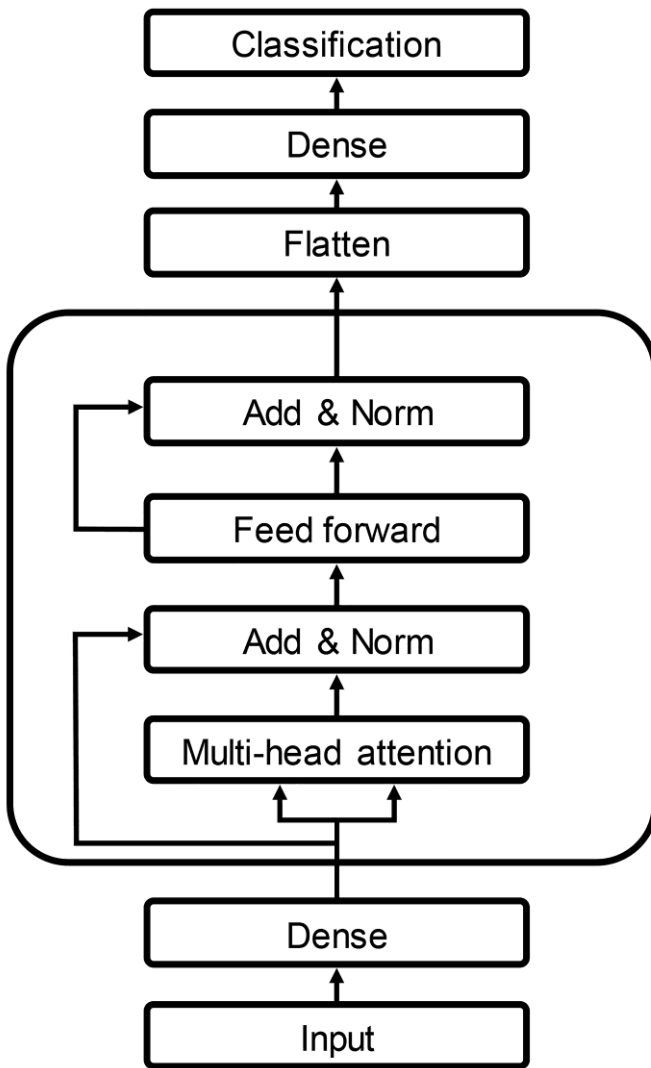
²Mean (standard deviation) presented for continuous variables.

DOAC: Direct oral anticoagulant; ESD: Endoscopic submucosal dissection; INR: International normalized ratio; NSAIDs: Non-steroidal anti-inflammatory drugs; PEB, Post-ESD bleeding; P2Y12RA: P2Y12 receptor antagonist.

Supplementary Table 2 Logistic regression analysis for predictors of bleeding after endoscopic submucosal dissection in entire cohort

Variables	Multivariable			β regression coefficient	
	OR	95%CI	P value		
Age	0.98	0.96–0.99	< 0.001	-0.024	
Gender	Female/male	1.65	1.19–2.28	0.003	0.499
Hypertension	No/yes	1.56	1.19–2.03	0.001	0.442
Diabetes mellitus	No/yes	1.17	0.88–1.57	0.280	0.161
Liver cirrhosis	No/yes	0.63	0.22–1.80	0.394	-0.454
Chronic kidney disease	No/yes	1.78	1.18–2.70	0.006	0.577
Aspirin	No/yes	1.61	0.74–3.55	0.233	0.479
P2Y12RA	No/yes	2.40	1.22–4.74	0.011	0.877
Warfarin	No/yes	2.31	0.53–10.10	0.265	0.838
DOAC	No/yes	4.31	1.26–14.78	0.020	1.461
Cilostazol	No/yes	1.09	0.30–4.00	0.897	0.086
NSAIDs	No/yes	1.81	0.53–6.17	0.341	0.595
Preprocedure management of AT	No indication	1			
	Interruption	0.58	0.24–1.39	0.220	-0.548
	Replacement or heparin bridge	1.79	0.34–9.36	0.488	0.585
Multiple	No/yes	1.50	0.98–2.30	0.062	0.406
	Upper	1			
Location	Middle	1.72	1.07–2.74	0.024	0.540
	Lower	0.94	0.59–1.50	0.796	-0.062
Size		1.03	1.02–1.04	< 0.001	0.034
Undifferentiated type	No/yes	0.85	0.39–1.88	0.691	-0.161
Piecemeal	No/yes	1.01	0.36–2.83	0.982	0.012
Albumin, g/dL		1.25	0.87–1.80	0.231	0.224
INR		1.68	0.36–7.88	0.511	0.519

AT: Antithrombotic; DOAC: Direct oral anticoagulant; ESD: Endoscopic submucosal dissection; INR: International normalized ratio; NSAIDs: Non-steroidal anti-inflammatory drugs; P2Y12RA: P2Y12 receptor antagonist.



Supplementary Figure 1 The architecture.