

Supplementary Table 1. Information of AIH subtypes combination						
IPH	SAH	SDH	EDH	IVH	Case no.	Volume (mm³)
O					7	10.28 ± 22.03
O	O				1	59.58 ± 3.33
O				O	7	32.46 ± 29.31
O	O	O			6	33.10 ± 32.26
O	O			O	1	63.04 ± 1.43
O		O		O	1	19.55 ± 0.92
O	O	O		O	5	96.83 ± 81.92
O	O	O	O		1	21.27 ± 0.76
O	O	O	O	O	1	44.00 ± 2.08
	O				8	7.06 ± 15.11
	O	O			3	2.36 ± 1.86
	O			O	1	16.81 ± 1.02
	O	O		O	1	18.52 ± 1.82
		O			8	52.89 ± 72.83
		O	O		1	0.65 ± 0.08
Volumes are described as mean ± SD measure by three neuroradiologists. IPH, intraparenchymal hemorrhage; IVH, intraventricular hemorrhage; SAH, subarachnoid hemorrhage; and SDH, subdural hemorrhage; SD, standard deviation; EDH, extradural hemorrhage; SDH, subdural hemorrhage.						

Supplementary Table 2. Detection performance of AI solutions according to AIH etiology				
Etiology	Solution	Traumatic AIH (n = 27)	Non-traumatic AIH (n = 25)	P value
AUROC	A	0.94 (0.88, 0.98)	0.97 (0.94, 0.99)	0.655
	B	0.98 (0.95, 1.00)	1.00 (0.99, 1.00)	0.905
	C	0.95 (0.88, 0.99)	0.98 (0.96, 1.00)	0.789
AUPRC	A	0.52 (0.37, 0.73)	0.61 (0.43, 0.84)	0.762
	B	0.95 (0.87, 1.00)	0.98 (0.93, 1.00)	0.850
	C	0.84 (0.71, 0.94)	0.89 (0.76, 0.97)	0.801
Brier score	A	0.07 (0.05, 0.08)	0.07 (0.05, 0.08)	> 0.99
	B	0.02 (0.01, 0.03)	0.02 (0.01, 0.02)	0.776
	C	0.16 (0.15, 0.16)	0.15 (0.15, 0.16)	> 0.99
Sensitivity	A	0.89 (0.75, 1.00)	0.92 (0.79, 1.00)	> 0.99
	B	0.89 (0.75, 1.00)	0.92 (0.79, 1.00)	> 0.99
	C	0.93 (0.81, 1.00)	0.92 (0.79, 1.00)	> 0.99
	D	0.74 (0.56, 0.88)	0.96 (0.87, 1.00)	0.106
Specificity	A	0.91 (0.88, 0.94)	0.91 (0.88, 0.94)	> 0.99
	B	1.00 (0.99, 1.00)	1.00 (0.99, 1.00)	> 0.99
	C	0.93 (0.91, 0.95)	0.93 (0.90, 0.95)	> 0.99
	D	0.99 (0.97, 1.00)	0.99 (0.97, 1.00)	> 0.99
Precision	A	0.41 (0.28, 0.53)	0.40 (0.26, 0.52)	> 0.99
	B	0.96 (0.86, 1.00)	0.96 (0.86, 1.00)	> 0.99
	C	0.48 (0.34, 0.63)	0.46 (0.33, 0.60)	> 0.99
	D	0.80 (0.62, 0.95)	0.83 (0.68, 0.96)	> 0.99
F1 score	A	0.56 (0.42, 0.68)	0.55 (0.40, 0.67)	> 0.99
	B	0.92 (0.83, 0.98)	0.94 (0.86, 1.00)	> 0.99
	C	0.63 (0.49, 0.76)	0.61 (0.48, 0.72)	> 0.99
	D	0.77 (0.62, 0.89)	0.89 (0.79, 0.96)	0.279
Values are described with 95% CI in parentheses. AIH, acute intracranial hemorrhage; AUPRC, area under precision recall curve; AUROC, area under receiver operating characteristic curve; AI, artificial intelligence; CI, confidence interval.				

Supplementary Table 3. Additional binary-based detection performance of AI solutions according to AIH subtypes			
Subtype	Solution	False positive ratio	Negative predictive value
ICH (n = 52)	A	0.09 (0.07, 0.12)	0.99 (0.97, 1.00)
	B	0.00 (0.00, 0.01)	0.99 (0.97, 1.00)
	C	0.07 (0.05, 0.10)	0.99 (0.98, 1.00)
	D	0.01 (0.00, 0.03)	0.98 (0.96, 0.99)
IPH (n = 30)	A	0.09 (0.06, 0.12)	1.00 (0.99, 1.00)
	B	0.00 (0.00, 0.01)	1.00 (0.99, 1.00)
	C	0.07 (0.05, 0.10)	0.99 (0.98, 1.00)
	D	0.01 (0.00, 0.02)	0.99 (0.99, 1.00)
SAH (n = 28)	A	0.09 (0.06, 0.12)	0.99 (0.98, 1.00)
	B	0.00 (0.00, 0.01)	0.99 (0.98, 1.00)
	C	0.07 (0.05, 0.10)	1.00 (1.00, 1.00)
	D	0.01 (0.00, 0.03)	0.99 (0.98, 1.00)
SDH (n = 27)	A	0.09 (0.06, 0.12)	0.99 (0.99, 1.00)
	B	0.00 (0.00, 0.01)	1.00 (1.00, 1.00)
	C	0.07 (0.05, 0.10)	1.00 (1.00, 1.00)
	D	0.01 (0.00, 0.03)	0.99 (0.98, 1.00)
IVH (n = 17)	A	0.09 (0.06, 0.12)	1.00 (1.00, 1.00)
	B	0.00 (0.00, 0.01)	1.00 (1.00, 1.00)
	C	0.07 (0.05, 0.09)	1.00 (1.00, 1.00)
	D	0.01 (0.00, 0.03)	1.00 (1.00, 1.00)
Values are described with 95% CI in parentheses. ICH, intracranial hemorrhage; IPH, intraparenchymal hemorrhage; IVH, intraventricular hemorrhage; SAH, subarachnoid hemorrhage; SDH, subdural hemorrhage; AI, artificial intelligence; CI, confidence interval.			

Supplementary Table 4. AIH volume comparison between FN and TP cases					
Solution	TP (n)	TP volume (mm³)	FN (n)	FN volume (mm³)	P value
A	47	15.57	5	0.73	0.005*
B	47	15.57	5	0.30	0.002*
C	48	15.50	4	0.46	0.004*
D	44	16.74	8	0.46	< 0.001*
*P value < 0.05, statistical significance. Mann-Whitney U test was conducted and the median of volumes are described. FN, false negative; TP, true positive; AIH, acute intracranial hemorrhage.					

Supplementary Table 5. Comparisons of false negative rate between small and large AIH			
Solution	Small AIH (< 10 mm³)	Large AIH (≥ 10 mm³)	P value
A	0.22 (0.04, 0.39)	0.00 (0.00, 0.00)	0.017*
B	0.22 (0.09, 0.39)	0.00 (0.00, 0.00)	0.017*
C	0.17 (0.04, 0.35)	0.00 (0.00, 0.00)	0.043*
D	0.35 (0.17, 0.57)	0.00 (0.00, 0.00)	0.002*
*P value < 0.05, statistical significance. Values are described with 95% CI in parentheses. AIH, acute intracranial hemorrhage; CI, confidence interval.			