eTable 1 The 49 SAH cases used for the pixel-level performance analyses.

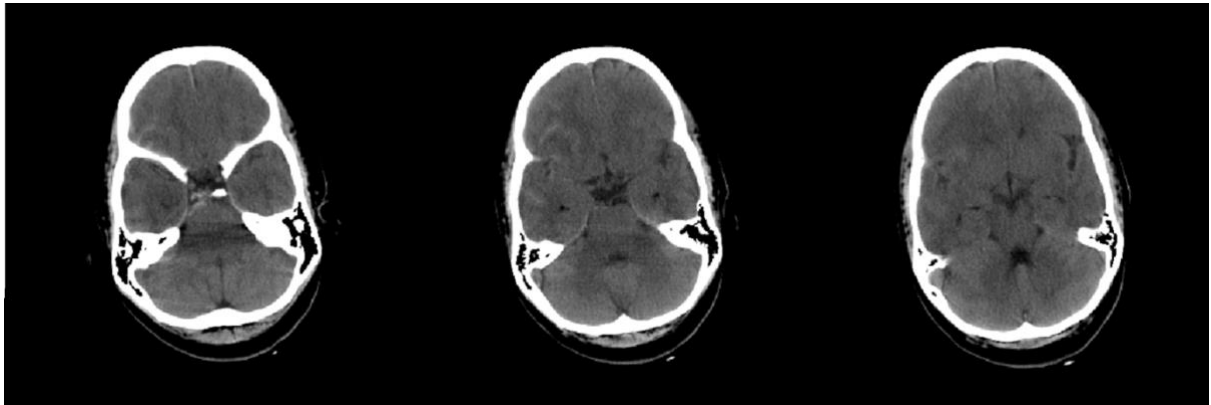|	SAH
Cases	49
● Women (%)	23 (46.9)
● Men (%)	26 (53.1)
Number of axial slices	1868
● SAH	799
● No SAH	1069
Slice thickness in mm, mean (SD)	4.0 (0.5)
Slices per case, mean (SD)	38.1 (5.8)
Age in years, mean (SD)	58.8 (11.9)
SAH cases per scanners	49
● GE Lightspeed VCT	36
● GE Discovery CT750 HD	7
● GE Revolution HD	1
● Siemens Somatom Definition AS	1
● Siemens Somatom Definition AS+	1
● Siemens Somatom Definition Edge	1
● Toshiba Aquilion Prime 80	1
● Toshiba Aquilion	1

eTable 2 Patient- and slice-level inter-rater reliabilities (IRR) for 519 emergency head CT scans performed during on call hours in September 2021. Rater 1 = neurosurgeon. Rater 2 = medical doctor. Rater 3 = medical image analyst (data engineer).

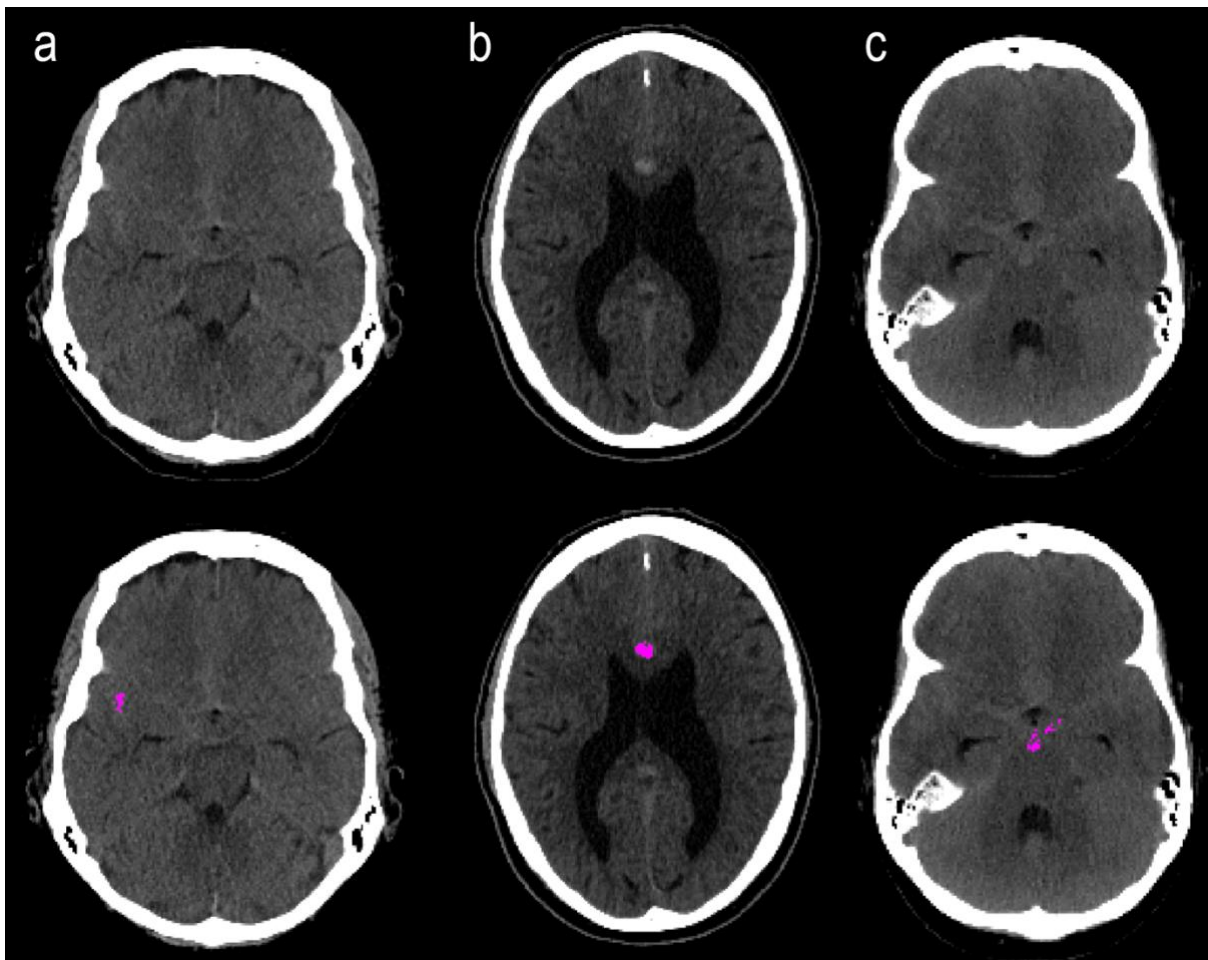|	Patient-level IRR	Slice-level IRR
Rater 1 – Rater 2	0.99	0.99
Rater 1 – Rater 3	0.97	0.99
Rater 2 – Rater 3	0.98	0.99

eTable 3 Slice- and pixel-level results of 49 head CT scans (1868 slices and >122 million pixels) with SAH. These 49 SAH cases were manually segmented in the same way than 90 SAH cases that were used for the model training. CI = confidence interval.

	Slices with SAH	Slices without SAH	Pixels with SAH	Pixels without SAH
Number	799	1069	278648	122142600
Predicted SAH	623	35	148077	16935
Sensitivity (95 % CIs)	0.78 (0.75-0.81)		0.53 (0.53-0.53)	
Specificity (95% CIs)	0.97 (0.95-0.98)		1.00 (1.00-1.00)	
False positive rate (95% CIs)	0.03 (0.02-0.50)		0.00 (0.00-0.00)	
False negative rate (95% CIs)	0.22 (0.19-0.25)		0.47 (0.47-0.47)	
Accuracy (95% CIs)	0.89 (0.87-0.90)		1.00 (1.00-1.00)	

eFigure 1 Three axial MPR slices with SAH. The algorithm found no SAH in any of these slices. This missed SAH case was part of the CQ500 dataset.

eFigure 2 Three different head CT scans with SAH. These three head CT scans were misinterpreted as normal in emergency departments by on call radiologists and clinicians. All these patients suffered later from an aneurysm re-rupture and second SAH. The algorithm identified and segmented SAH in these three cases (a-c).

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