



Abbreviations

CI	Confidence interval
CT	Computed tomography
DOR	Diagnostic odds ratio
HSROC	Hierarchical summary receiver operating characteristic

coverage, contrast agent type, dose of contrast agent, injection rate of contrast agent, software for CT perfusion, CT perfusion parameters, and cutoff values for diagnosis of hemorrhagic transformation.

Quality assessment was performed according to the Quality Assessment of Diagnostic Accuracy Studies-2 (QUADAS-2) tool [24]. The literature search, literature selection, data extraction, and quality assessment were performed independently by two reviewers (C.H.S. and S.C.J.).

Data synthesis and analysis

For the  $2 \times 2$  tables, the results with the highest diagnostic

## Literature search

The detailed literature selection process is shown in Fig. 1. The systematic search found 127 articles. After removal of 12

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supports the use of perfusion CT for predicting hemorrhagic transformation in acute ischemic stroke.

The 2018 American Heart Association/American Stroke Association (AHA/ASA) guideline recommends non-contrast CT for initial brain imaging evaluation and CT angiography for vessel evaluation if patients are suspected of having intracranial large vessel occlusion [43]. In addition, perfusion CT is recommended within 6 to 24 h of symptom onset for selected acute ischemic stroke patients with large vessel occlusion in the anterior circulation [43]. Multimodal CT protocols are rapidly accessible and widely available and are already part of the routine protocol in many stroke centers. Perfusion CT can be a part of these multimodal CT protocols and can provide multiple parameters in a fast and easy acquisition. The one drawback of perfusion CT is the radiation dose; however, the prpro-





Informed consent

systematic reviews of diagnostic test accuracy was assessed. J