**Supplemental Material 1.** Search strategies used

**PubMed**

“Stroke”[mh] OR “Ischemic stroke”[mh] OR “Embolic stroke”[mh] OR “Cerebral Infarction”[mh] OR “Infarction, middle cerebral artery”[mh] OR “Brain infarction”[mh] OR “Stroke, lacunar”[mh] OR “Thrombotic stroke”[mh] OR Stroke[tiab] OR Cerebral infarction[tiab] OR Brain infarction[tiab] OR Middle cerebral artery infarct\*[tiab] OR Middle cerebral artery occlusion[tiab] OR Cerebral infarct\*[tiab] OR Brain infarct\*[tiab] OR Hemorrhagic strokes[tiab] OR Stroke[tiab] OR Cerebrovascular accident[tiab] OR Cerebrovascular accident, [tiab] OR Apoplexy[tiab] OR Brain vascular accident\*[tiab] OR Cryptogenic embolism[tiab] OR Cerebral infarct\*[tiab] OR Subcortical infarction[tiab] OR Choroidal artery infarction [tiab] OR MCA infarction[tiab] OR Cerebral artery Infarction[tiab] OR Cerebral artery embol\*[tiab] OR Cerebral artery occlusion[tiab] OR Cerebral artery thromb\*[tiab] OR Brain venous infarction[tiab] OR Cerebral ischemia reperfusion injury[tiab] OR Brain ischemi\* reperfusion injury[tiab] OR Brain ischemia/reperfusion[tiab] OR Cerebral ischemia/reperfusion[tiab] OR Cerebral reperfusion injury[tiab] OR Reperfusion brain injury[tiab] OR Acute cerebrovascular lesion[tiab] OR Acute focal cerebral vasculopathy[tiab] OR Brain vascular accident[tiab] OR Cerebrovascular injury[tiab] OR Cortical infarction[tiab] OR Hemisphere infarct\*[tiab] OR Hemispheric infarct\*[tiab] OR Brain stem infarction\*[tiab] OR Brainstem infarction[tiab] OR Cerebellar infarction[tiab] OR Brain ischemia[tiab] OR Brain ischaemic attack[tiab] OR Brain ischemic attack[tiab]

AND

“Interleukin-1 receptor-Like 1 Protein”[mh] OR SUPPRESSION OF TUMORIGENICITY 2 protein\*[tiab] OR Soluble suppression of tumorigenicity-2[tiab] OR sST2[tiab] OR ST2[tiab] OR Interleukin 1 receptor-like 1 protein[tiab] OR IL1RL1 protein\*[tiab] OR protein IL1RL1[tiab] OR ST2 protein [tiab] OR ST2S protein\*[tiab] OR protein ST2[tiab] OR Stimulation-2 protein[tiab] OR FIT-1 protein[tiab] OR Fos-induced transcript 1 protein[tiab] OR ST2V protein\*[tiab] OR ST2L protein\*[tiab]

**EMBASE**

“Cerebral ischemia reperfusion injury”/exp OR “Cerebrovascular accident”/exp OR “Cardioembolic stroke”/exp OR “Brain infarction”/exp OR “Brain stem infarction”/exp OR “Cerebellum infarction”/exp OR “Brain ischemia”/exp OR “Transient ischemic attack”/exp OR “Stroke”:ab,ti OR “Cerebral Infarction”:ab,ti OR “Brain infarction”:ab,ti OR “Middle cerebral artery infarct\*”:ab,ti OR “Middle cerebral artery occlusion”:ab,ti OR “Cerebral Infarct\*”:ab,ti OR “Brain Infarct\*”:ab,ti OR “Hemorrhagic strokes”:ab,ti OR “Stroke”:ab,ti OR “Cerebrovascular accident”:ab,ti OR “Cerebrovascular accident, “:ab,ti OR “Apoplexy”:ab,ti OR “Brain vascular accident\*”:ab,ti OR “Cryptogenic embolism”:ab,ti OR “Cerebral infarct\*”:ab,ti OR “Subcortical infarction”:ab,ti OR “Choroidal artery infarction “:ab,ti OR “MCA infarction”:ab,ti OR “Cerebral artery infarction”:ab,ti OR “Cerebral artery embol\*”:ab,ti OR “Cerebral artery occlusion”:ab,ti OR “Cerebral artery thromb\*”:ab,ti OR “Brain venous infarction”:ab,ti OR “Cerebral ischemia reperfusion injury”:ab,ti OR “Brain ischemi\* reperfusion injury”:ab,ti OR “Brain ischemia/reperfusion”:ab,ti OR “Cerebral ischemia/reperfusion”:ab,ti OR “Cerebral reperfusion injury”:ab,ti OR “Reperfusion brain injury”:ab,ti OR “Acute cerebrovascular lesion”:ab,ti OR “Acute focal cerebral vasculopathy”:ab,ti OR “Brain vascular accident”:ab,ti OR “Cerebrovascular injury”:ab,ti OR “Cortical infarction”:ab,ti OR “Hemisphere infarct\*”:ab,ti OR “Hemispheric infarct\*”:ab,ti OR “Brain stem infarction\*”:ab,ti OR “Brainstem infarction”:ab,ti OR “Cerebellar infarction”:ab,ti OR “Brain ischemia”:ab,ti OR “Brain ischaemic attack”:ab,ti OR “Brain ischemic attack”:ab,ti

AND

“Interleukin 1 receptor like 1 protein”/exp OR “Suppression of tumorigenicity 2 protein\*”:ab,ti OR “Soluble suppression of tumorigenicity-2”:ab,ti OR “sST2”:ab,ti OR “ST2”:ab,ti OR “Interleukin 1 receptor-like 1 protein”:ab,ti OR “IL1RL1 protein\*”:ab,ti OR “Protein IL1RL1”:ab,ti OR “ST2 protein “:ab,ti OR “ST2S protein\*”:ab,ti OR “Protein ST2”:ab,ti OR “Stimulation-2 protein”:ab,ti OR “FIT-1 protein”:ab,ti OR “Fos-induced transcript 1 protein”:ab,ti OR “ST2V protein\*”:ab,ti OR “ST2L protein\*”:ab,ti

**SCOPUS**

TITLE-ABS-KEY (“Stroke” OR “Cerebral infarction” OR “Brain infarction” OR “Middle cerebral artery infarct\*” OR “Middle cerebral artery occlusion” OR “Cerebral infarct\*” OR “Brain infarct\*" OR “Hemorrhagic strokes” OR “Stroke” OR “Cerebrovascular accident” OR “Cerebrovascular accident,” OR “Apoplexy” OR “Brain vascular accident\*” OR “Cryptogenic embolism” OR “Cerebral infarct\*” OR “Subcortical infarction” OR “Choroidal artery infarction” OR “MCA infarction” OR “Cerebral artery infarction” OR “Cerebral artery embol\*” OR “Cerebral artery occlusion” OR “Cerebral artery thromb\*” OR “Brain venous infarction” OR “Cerebral ischemia reperfusion injury” OR “Brain ischemi\* reperfusion injury” OR “Brain ischemia/reperfusion” OR “Cerebral ischemia/reperfusion” OR “Cerebral reperfusion injury” OR “Reperfusion brain injury” OR “Acute cerebrovascular lesion” OR “Acute focal cerebral vasculopathy” OR “Brain vascular accident” OR “Cerebrovascular injury” OR “Cortical infarction” OR “Hemisphere infarct\*” OR “Hemispheric infarct\*” OR “Brain stem infarction\*” OR “Brainstem infarction” OR “Cerebellar infarction” OR “Brain ischemia” OR “ Brain ischaemic attack” OR “Brain ischemic attack”)

AND

(TITLE-ABS-KEY (“SUPPRESSION OF TUMORIGENICITY 2 protein”) OR TITLE-ABS-KEY (“Soluble suppression of tumorigenicity-2”) OR TITLE-ABS-KEY (“sST2”) OR TITLE-ABS-KEY (“ST2”) OR TITLE-ABS-KEY (“interleukin 1 receptor-like 1 protein”) OR TITLE-ABS-KEY (“IL1RL1 protein”) OR TITLE-ABS-KEY (“protein IL1RL1”) OR TITLE-ABS-KEY (“ST2 protein”) OR TITLE-ABS-KEY (“ST2S protein”) OR TITLE-ABS-KEY (“protein ST2”) OR TITLE-ABS-KEY (“Stimulation-2 protein”) OR TITLE-ABS-KEY (“FIT-1 protein”) OR TITLE-ABS-KEY (“Fos-induced transcript 1 protein”) OR TITLE-ABS-KEY (“ST2V protein" ) OR TITLE-ABS-KEY (“ST2L protein”))

**Web of Science**

ALL=(“Suppression of tumorigenicity 2 protein” OR “Soluble suppression of tumorigenicity-2” OR “sST2” OR “ST2” OR “Interleukin 1 receptor-like 1 protein” OR “IL1RL1 protein” OR “Protein IL1RL1” OR “ST2 protein” OR “ST2S protein” OR “protein ST2” OR “Stimulation-2 protein” OR “FIT-1 protein” OR “Fos-induced transcript 1 protein”)

AND

ALL=(“Stroke” OR “Cerebral infarction” OR “Brain infarction” OR “Middle cerebral artery infarct\*” OR “Middle cerebral artery occlusion” OR “Cerebral infarct\*” OR “Brain infarct\*” OR “Hemorrhagic strokes” OR “Stroke” OR “Cerebrovascular accident” OR “Cerebrovascular accident, “ OR “Apoplexy” OR “ Brain vascular accident\*” OR “Cryptogenic embolism” OR “Cerebral infarct\*” OR “Subcortical infarction” OR “Choroidal artery infarction ” OR “MCA infarction” OR “Cerebral artery infarction” OR “Cerebral artery embol\*” OR “Cerebral artery occlusion” OR “Cerebral artery thromb\*” OR “Brain venous infarction” OR “Cerebral ischemia reperfusion injury” OR “Brain ischemi\* reperfusion injury” OR “Brain ischemia/reperfusion” OR “Cerebral ischemia/reperfusion” OR “Cerebral reperfusion injury” OR “Reperfusion brain injury” OR “Acute cerebrovascular lesion” OR “Acute focal cerebral vasculopathy” OR “Brain vascular accident” OR “Cerebrovascular injury” OR “Cortical infarction” OR “Hemisphere infarct\*” OR “Hemispheric infarct\*” OR “Brain stem infarction\*” OR “Brainstem infarction” OR “Cerebellar infarction” OR “Brain ischemia” OR “Brain ischaemic attack” OR “Brain ischemic attack”)



**Supplemental Data Figure S1.** Publication bias of the included studies on the value of serum sST-2 levels in the prediction of stroke. Estimated 𝜃IV indicates the pooled estimated effect size determined using the inverse variance-weighted average model.

Abbreviation: CI, confidence interval.



**Supplemental Data Figure S2.** Publication bias of the included studies on the value of serum sST-2 in the prognosis of post-stroke outcomes. Estimated 𝜃IV indicates the pooled estimated effect size determined using the inverse variance-weighted average model.

Abbreviation: CI, confidence interval.