

Study	Definition of ENI	Definition of sICH
Weyland, 2021	Any improvement in NIHSS	Heidelberg Bleeding Classification
Guenego, 2020	Improvement of 8 or more points in NIHSS	N/A
Sun, 2021	Improvement of 8 or more points in NIHSS	N/A
Wirtz, 2019	Improvement of 8 or more points in NIHSS	N/A
Heit, 2019	Improvement of 8 or more points in NIHSS	Increase of at least 4 points in NIHSS and no hemorrhage on imaging within 36 hours
Soize, 2019	Improvement of 4 or more points in NIHSS	N/A
Pu, 2018	Improvement of 12% or greater in NIHSS	Heidelberg Bleeding Classification
Cao, 2017	Improvement of 30% or greater in NIHSS	N/A
Cai, 2021	Improvement of 8 or more points in NIHSS	N/A

Supplementary Table S1. Definitions of ENI and sICH of the included studies

Supplementary Table S2 Risk of bias assessment. Risk of bias was assessed using “ROBINS-I: a tool for assessing risk of bias in non-randomised studies of interventions”.

Study	D1	D2	D3	D4	D5	D6	D7	Overall
Weyland, 2021	Moderate	Low	Low	No information	Low	Moderate	Low	Moderate
Guenego, 2020	Moderate	Low	Moderate	No information	Low	Moderate	Low	Moderate
Sun, 2021	Low	Low	Moderate	No information	Low	Low	Low	Low
Wirtz, 2019	Moderate	Low	Low	No information	Low	Moderate	Low	Moderate
Heit, 2019	Low	Low	Low	No information	Low	Low	Low	Low
Soize, 2019	Moderate	Low	Moderate	No information	Low	Moderate	Low	Moderate
Pu, 2018	Moderate	Low	Moderate	No information	Low	Moderate	Low	Moderate
Cao, 2017	Moderate	Low	Low	No information	Low	Moderate	Low	Moderate
Cai, 2021	Low	Low	Low	No information	Low	Low	Low	Low

Supplementary Figure S1 PRISMA flow diagram showing the review process.