Table 1 Completed studies and clinical trials of tranexamic acid in intracerebral haemorrhage

| | Sorimachi 2005[27] | Sorimachi 2007[28] | Ojacastro 2008[29] | TICH 2014[30] | Arumugam 2015[31] |
|---|---|---|---|---|---|
| Design | Retrospective observational | Observational | Observational | RCT | RCT |
| Number of patients | 156 | 95* | 30 | 24 | 30 |
| Intervention (intravenous tranexamic acid infusion) | 2 g over 10 minutes | 2 g over 10 minutes | 500 mg 3 times | 1 g over 10 minutes followed by 1 g over 8 hours | 1 g over 10 minutes followed by 1 g over 8 hours |
| Control | 1 g TA over 6 hours | No control | Usual care | Placebo | Placebo |
| Baseline to 24 hour haematoma expansion | Less HE of >20% with rapid infusion (17.5% vs. 4.3%, p=0.011) | HE of >20% in 4.2% | Less HE by day 3 with TA (no data provided) | HE of >6 mL (13% placebo vs 19% TA, p=NR) | No ICH volume change with TA (placebo median 14.53 to 17.59 mL, p = 0.001 vs TA 10.06 to 10.08 mL, p=0.313) |
| Clinical outcome | NR | Earlier of discharge or 30 day mRS 0-2=29%, no control arm | No effect on length of stay or in-hospital NIHSS (p=NR) | Mean mRS (3.4 control vs 3.6 TA p=0.82) | Mean GOS score (3.6 control vs 4.3 TA, p=NR) |

*Paper additionally includes all rapid infusion patients of the 2005 study, total n=188.
RCT=randomised controlled trial, IV=intravenous, HE=haematoma expansion, TA=tranexamic acid, NR=not reported, NIHSS=National Institutes of Health Stroke Scale, mRS=modified Rankin Scale, GOS=Glasgow Outcome Scale

Table 2 Comparison of ongoing trials of tranexamic acid in intracerebral haemorrhage

| | STOP-AUST | TICH-2 | NOR-ICH | TRAIGE | TICH-NOAC | EsICH |
|---|---|---|---|---|---|---|
| Start date | Dec 2012 | March 2013 | June 2014 | Sept 2015 | November 2016 | January 2017 |
| Number recruited/target | 39/100 | 1683/2000 | 20/540 | -/240 | 0/109 | 0/100 |
| TA dose (g x no.) | 1 x 2 | 1 x 2 | 1 x 4 | 1 x 2 | 1 x 2 | 1 x 2 |
| Age, years | ≥18 | ≥18 | 18-80 | ≥18 | ≥18 | ≥18 |
| Premorbid mRS | N/A | 0-3 | 0-2 | 0-1 | 0-4 | 0-3 |
| GCS | 8-15 | 5-15 | 9-15 | 8-15 | 5-15 | 8-15 |
| Time, hour | <4.5 | <8 | Arm A: <2.5<br>Arm B: 2.5-4.5 | <8 | <12, NOAC intake <48 h | <8 |
| Haematoma location | Brainstem bleed excluded | N/A | N/A | supratentorial only | N/A | N/A |
| ICH volume, ml | <70 | N/A | <60 | <70 | N/A | N/A |
| IVH volume, ml | N/A | N/A | <10 | <50% of lateral ventricles | N/A | N/A |
| Spot sign positive only | Y | N | N | Y | N | N |
| Planned surgery < 24 hours | exclude | not excluded | exclude | exclude | exclude | exclude |
| Primary Outcome | HE 24 h* | mRS 90d† | HE 24 h* | HE 24 h* | HE 24 h* | mRS 90d† |
| Secondary Outcome | mRS 90d† | | mRS 90d† | mRS 90d† | mRS 90d†<br>mortality 90d;<br>major TE events 90d‡ | |
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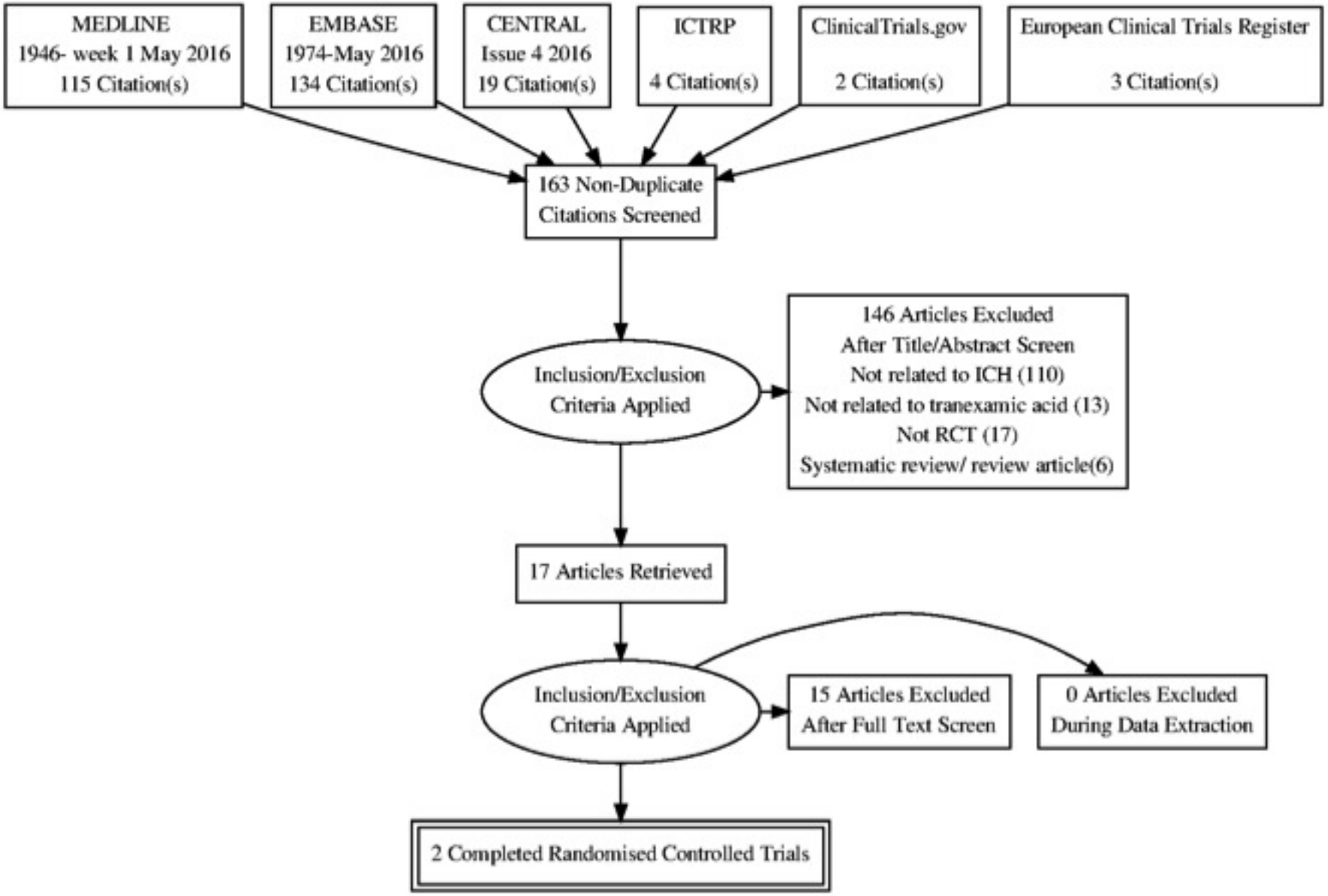
BSRG=Bergen Stroke Research Group; ECRI= European Cerebrovascular Research Infrastructure; GCS= Glasgow coma scale; HE=haematoma expansion; ICH=intracerebral haemorrhage; IVH=intraventricular haemorrhage; mRS=modified Rankin Scale; N/A=not available; NHMRC=National Health and Medical Research Council, Australia; NOAC= novel oral anticoagulants; NORSTROKE = Norwegian Stroke Research Registry; TA= Tranexamic Acid; UMF= University of Medicine & Pharmacy; *Haematoma expansion measured at 24 hour post-ictus; † modified Rankin Scale at 90 days; ‡myocardial infarction, ischemic stroke, pulmonary embolism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1946- week 1 May 2016
115 Citation(s)
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163 Non-Duplicate
Citations Screened
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Criteria Applied
146 Articles Excluded
After Title/Abstract Screen
Not related to ICH (110)
Not related to tranexamic acid (13)
Not RCT (17)
Systematic review/ review article(6)
17 Articles Retrieved
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Criteria Applied
15 Articles Excluded
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0 Articles Excluded
During Data Extraction
2 Completed Randomised Controlled Trials