

*Supplementary Table 1*

Search strategy for Pubmed

| Serial Number | Strategy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1            | "antithrombin III-protease complex"[Supplementary Concept] OR "Antithrombin III"[MeSH Terms]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| #2            | "Antithrombin"[Title/Abstract] OR "antithrombin III-protease complex"[Title/Abstract] OR "Heparin Co Factor I"[Title/Abstract] OR "Atenativ"[Title/Abstract] OR "Thrombate III" [Title/Abstract] OR "Antithrombin III Alpha"[Title/Abstract] OR "Kybernin"[Title/Abstract] OR "thrombin-antithrombin complex"[Title/Abstract] OR "AT III-protease complex"[Title/Abstract]                                                                                                                                                                                                                                                                                                                                                               |
| #3            | #1 OR #2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| #4            | "Stroke"[Mesh]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| #5            | "Stroke"[Title/Abstract] OR "Cerebrovascular Accident"[Title/Abstract] OR "Cerebrovascular Apoplexy"[Title/Abstract] OR "Brain Vascular Accident"[Title/Abstract] OR "Cerebrovascular Stroke"[Title/Abstract] OR "Apoplexy"[Title/Abstract] OR "Cerebral Stroke"[Title/Abstract] OR "Acute Stroke"[Title/Abstract] OR "Acute Cerebrovascular Accident"[Title/Abstract] OR "Brain Infarction"[Title/Abstract] OR "Cerebral Infarction"[Title/Abstract] OR "Ischemic Stroke"[Title/Abstract] OR "Embolic Stroke"[Title/Abstract] OR "Thrombotic Stroke"[Title/Abstract] OR "Cardioembolic stroke"[Title/Abstract] OR "Lacunar stroke"[Title/Abstract] OR "Atherothrombotic stroke"[Title/Abstract] OR "Cryptogenic stroke"[Title/Abstract] |
| #6            | #4 OR #5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| #7            | #3 AND #6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

### Search strategy for EMBASE

| Serial Number | Strategy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1            | 'antithrombin iii'/exp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| #2            | 'antithrombin iii':ab,ti OR 'antithrombin protein':ab,ti OR 'heparin co factor i':ab,ti OR 'atenativ':ab,ti OR 'thrombate iii':ab,ti OR 'antithrombin iii alpha':ab,ti OR 'kybernin':ab,ti OR 'thrombin-antithrombin complex':ab,ti OR 'at iii-protease complex':ab,ti OR 'antithrombin iii-protease complex':ab,ti                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| #3            | #1 OR #2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| #4            | 'cerebrovascular accident'/exp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| #5            | 'cerebrovascular accident':ab,ti OR 'stroke':ab,ti OR 'acute cerebrovascular lesion':ab,ti OR 'acute focal cerebral vasculopathy':ab,ti OR 'acute stroke':ab,ti OR 'apoplectic stroke':ab,ti OR 'apoplexi':ab,ti OR 'apoplexy':ab,ti OR 'brain blood flow disturbance':ab,ti OR 'brain accident':ab,ti OR 'brain attack':ab,ti OR 'brain insult':ab,ti OR 'brain ischaemic attack':ab,ti OR 'brain ischemic attack':ab,ti OR 'brain vascular accident':ab,ti OR 'cerebral apoplexia':ab,ti OR 'cerebral insult':ab,ti OR 'cerebral stroke':ab,ti OR 'cerebral vascular accident':ab,ti OR 'cerebral vascular insufficiency':ab,ti OR 'cerebro vascular accident':ab,ti OR 'cerebrovascular arrest':ab,ti OR 'cerebrovascular failure':ab,ti OR 'cerebrovascular injury':ab,ti OR 'cerebrovascular insufficiency':ab,ti OR 'cerebrovascular insult':ab,ti OR 'cerebrum vascular accident':ab,ti OR 'cryptogenic stroke':ab,ti OR 'cva':ab,ti OR 'ischaemic cerebral attack':ab,ti OR 'ischaemic seizure':ab,ti OR 'thrombotic strokes':ab,ti OR 'brain infarction':ab,ti OR 'hemorrhagic stroke':ab,ti OR 'ischemic stroke':ab,ti OR 'cerebral infarction':ab,ti OR 'embolic stroke':ab,ti |
| #6            | #4 OR #5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| #7            | #3 AND #6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

### Search strategy for Cochrane library

| Serial Number | Strategy                                                                                                                                                                   |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1            | MeSH descriptor: [Antithrombins] explode all trees                                                                                                                         |
| #2            | (antithrombin):ti,ab,kw OR ("Kybernin"):ti,ab,kw OR (Thrombate III):ti,ab,kw OR (Atenativ):ti,ab,kw OR (Heparin Co Factor I):ti,ab,kw                                      |
| #3            | (antithrombin III-protease complex):ti,ab,kw OR (thrombin-antithrombin complex):ti,ab,kw OR (AT III-protease complex):ti,ab,kw                                             |
| #4            | #1 OR #2 OR #3                                                                                                                                                             |
| #5            | MeSH descriptor: [Stroke] explode all trees                                                                                                                                |
| #6            | (Stroke):ti,ab,kw OR (cerebrovascular accident):ti,ab,kw OR (Cerebrovascular Apoplexy):ti,ab,kw OR (Brain Vascular Accident):ti,ab,kw OR (Cerebrovascular Stroke):ti,ab,kw |
| #7            | (thrombotic stroke):ti,ab,kw OR (Apoplexy):ti,ab,kw OR (Cerebral Stroke):ti,ab,kw OR (Cerebral Stroke):ti,ab,kw OR (Acute Cerebrovascular Accident):ti,ab,kw               |
| #8            | (Brain Infarction):ti,ab,kw OR (hemorrhagic stroke):ti,ab,kw OR (ischemic stroke):ti,ab,kw OR (cerebral infarction):ti,ab,kw OR (Embolic Stroke):ti,ab,kw                  |
| #9            | (Acute Stroke):ti,ab,kw OR (Cardioembolic stroke):ti,ab,kw OR (Lacunar stroke):ti,ab,kw OR (Atherothrombotic stroke):ti,ab,kw OR (Cryptogenic stroke):ti,ab,kw             |
| #10           | #5 OR #6 OR #7 OR #8 OR #9                                                                                                                                                 |
| #11           | #4 AND #10                                                                                                                                                                 |