

Appendix S1: Literature search strategies

Database searched: Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily, Ovid MEDLINE and Versions(R)

Platform or provider used: Ovid SP

Date of coverage: 1946 to February 2024

Search undertaken: February 2024

- 1 acute aortic syndrome/
- 2 aneurysm, dissecting/ or exp aortic aneurysm/
- 3 (AAS or (aortic syndrome* and acute)).mp.
- 4 ((aort* adj3 dissect*) and acute*).mp.
- 5 ((intramural adj3 h?ematoma*) or (intra-mural adj3 h?ematoma*)).mp.
- 6 ((aort* adj3 ulcer*) and (atherosclero* or penetrat* or symptom*)).mp.
- 7 1 or 2 or 3 or 4 or 5 or 6
- 8 (scor* or biomarker* or D-dimer*).mp.
- 9 clinical decision rules/
- 10 clinical decision rule*.mp.
- 11 exp Biomarkers/
- 12 (biomarker* or bio-marker*).mp.
- 13 (desmosine or aggrecan or calponin or creatinine kinase or C-reactive protein or elastin or matrix metalloproteinase*).mp.
- 14 Fibrin Fibrinogen Degradation Products/
- 15 d-dimer.mp.
- 16 ADD-RS.mp.
- 17 or/8-16
- 18 exp "Sensitivity and Specificity"/ or sensitivity.tw. or specificity.tw. or ((pre-test or pretest) adj probability).tw. or post-test probability.tw. or predictive value\$.tw. or likelihood ratio\$.tw. or ROC.tw.
- 19 7 and 17 and 18

Databases searched: EMBASE
Platform or provider used: Ovid SP
Date of coverage: 1974 to February 2024
Search undertaken: February 2024

- 1 acute aortic syndrome/
- 2 aneurysm, dissecting/ or exp aortic aneurysm/ or dissecting aneurysm/ or acute aortic syndrome/ or aorta dissection/
- 3 (AAS or (aortic syndrome* and acute)).mp.
- 4 ((aort* adj3 dissect*) and acute*).mp.
- 5 ((intramural adj3 h?ematoma*) or (intra-mural adj3 h?ematoma*)).mp.
- 6 ((aort* adj3 ulcer*) and (atherosclero* or penetrat* or symptom*)).mp.
- 7 1 or 2 or 3 or 4 or 5 or 6
- 8 (scor* or biomarker* or D-dimer*).mp.
- 9 clinical decision rules/ or exp clinical decision support system/
- 10 clinical decision rule*.mp.
- 11 exp biological marker/
- 12 (biomarker* or bio-marker*).mp.
- 13 (desmosine or aggrecan or calponin or creatinine kinase or C-reactive protein or elastin or matrix metalloproteinase*).mp.
- 14 exp fibrin degradation product/
- 15 d-dimer.mp.
- 16 ADD-RS.mp.
- 17 or/8-16
- 18 exp "Sensitivity and Specificity"/ or sensitivity.tw. or specificity.tw. or ((pre-test or pretest) adj probability).tw. or post-test probability.tw. or predictive value\$.tw. or likelihood ratio\$.tw. or ROC.tw.
- 19 7 and 17 and 18

Databases searched: Cochrane CENTRAL Register of Randomised Controlled Trials & Cochrane Database of Systematic Reviews

Platform or provider used: www.thecochranelibrary.com

Date of coverage: Inception to February 2024

Search undertaken: February 2024

- #1 MeSH descriptor: [Aneurysm, Dissecting] explode all trees
- #2 MeSH descriptor: [Aortic Aneurysm] explode all trees
- #3 (AAS or (aortic syndrome* and acute*)):ti,ab,kw (Word variations have been searched)
- #4 ((aort* near/3 dissect*) and acute*):ti,ab,kw (Word variations have been searched)
- #5 ((intramural near/3 hematoma*)):ti,ab,kw OR ((intramural near/3 haematoma*)):ti,ab,kw OR ((intra-mural near/3 hematoma*)):ti,ab,kw OR ((intra-mural near/3 haematoma*)):ti,ab,kw (Word variations have been searched)
- #6 (aort* near/3 ulcer*):ti,ab,kw AND (atherosclero* or penetrat* or symptom*):ti,ab,kw (Word variations have been searched)
- #7 #1 or #2 or #3 or #4 or #5 or #6
- #8 ((scor* or biomarker* or D-dimer*)):ti,ab,kw (Word variations have been searched)
- #9 MeSH descriptor: [Clinical Decision Rules] explode all trees
- #10 MeSH descriptor: [Biomarkers] explode all trees
- #11 (clinical decision rule*):ti,ab,kw OR (biomarker* or bio-marker* or biological marker*):ti,ab,kw (Word variations have been searched)
- #12 MeSH descriptor: [Fibrin Fibrinogen Degradation Products] explode all trees
- #13 (fibrin degradation product*):ti,ab,kw OR (fibrinogen degradation product*):ti,ab,kw (Word variations have been searched)
- #14 (desmosine or aggrecan or calponin or "creatinin* kinase*" or "C-reactive protein*" or elastin or "matrix metalloproteinase*"):ti,ab,kw (Word variations have been searched)
- #15 (d-dimer or ADD-RS):ti,ab,kw (Word variations have been searched)
- #16 #8 or #9 or #10 or #11 or #12 or #13 or #14 or #15
- #17 MeSH descriptor: [Sensitivity and Specificity] explode all trees
- #18 (sensitivity or specificity or ROC):ti,ab,kw OR ((pre-test or pretest) near/2 probability):ti,ab,kw OR (post-test probability):ti,ab,kw OR (predictive value*):ti,ab,kw OR (likelihood ratio*):ti,ab,kw (Word variations have been searched)
- #19 #17 or #18
- #20 #7 and #16 and #19