Appendix S1: Literature search strategies

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

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

#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