

## SUPPLEMENTAL MATERIAL

### **The effectiveness of interventions for the implementation of thromboprophylaxis in hospitalized patients at risk for venous thromboembolism: an updated abridged Cochrane systematic review and meta-analysis of Randomized Controlled Trials (RCT).**

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## Search Criteria

### 1. MEDLINE Ovid and Cochrane

1. exp Thrombosis/pc
2. exp Embolism/pc
3. (thrombosis or thrombotic or thrombus or thrombi or thromboembol\*).tw.
4. (emboli\* or embolus).tw.
6. clot?.tw.
7. (DVT or VTE or PE).tw.
8. or/1-7
9. exp Anticoagulants/
10. anticoagulant\*.tw.
11. (hydroxycoumarins or acenocoumarol or acenocoumar\* or minisintrom or nicoumalone or s?nc?umar or sintrom or s?nthrom\* or ancrod or ancrod or arvin or venacil or agkistrodon or arwinor or (blood adj3 coagulat\* adj3 inhibit\*) or "citric acid" or uralyt or dalteparin or tedelparin or fr-860 or fr860 or dalteparin or kabi2165 or kabi-2165 or fragmin\* or "dermatan sulfate" or chondroitin or dextran or dextrans or hemodex or promit or macrodex or saviosol or rheodextran or polyglucin or hyskon or rheomacrodex or infukoll or rheopolyglucin or rheoisodex or rondex or dic?umarol or dicoumarin or bishydroxycoumarin or edetic or tetracemate or calcitetracemate or edta or ethylenedinitrilotetraacetic or edetate or (calcium adj3 tetacine) or versenate or coprin or edathamil or versene or dinitrilotetraacetate or "chelaton 3" or enoxaparin\* or pk10169 or "pk 10169" or emt-967 or emt96\* or clexane or lovenox or emt-966 or (ethyl adj3 biscoumacetate) or ethyldicoumarol or pelentan or tromexan or carbethoxydicoumarol or foy or gabexate or heparin\* or at?eroid\* or liquaemin or nadroparin\* or fraxiparin\* or cy-216 or cy216 or "pentosan sulfuric polyester" or "pentosan sulphuric polyester" or ((polysulfate or polysulphate) adj sodium adj pentosan\*) or ((sulfuric or sulphuric) adj polyester adj pentosan\*) or fibrocid or ((hoe or bay or hoe-bay) adj "946") or ((pentosan\* or polypentose or xylan) adj (sulphate or sulfate or sp54 or sp-54 or polysulfate\* or polysulphate\*)) or pz68 or pz-68 or elmiron or hemoclar or phenindione or pindione or phenylene or fenilin or phenylindanedione or dindevan or phenprocoumon or falithrom or phenprogramma or phenprocoumalol or marcumar or phenylpropylhydroxycumarinum or phenprocoumarol or liquamar or marcoumar or "protein c" or "protein s" or warfarin marevan or coumadin\* or warfant or aldoumar or tedicoumar or "beta 2-glycoprotein i" or apo-h or anticardiolipin or "apolipoprotein h" or ec-vmfa or "endothelial cell viability maintaining factor" or "beta(2)gpi").tw.
12. exp Stockings, Compression/
13. exp Intermittent Pneumatic Compression Devices/
14. ((compression\* or thromboembolism-deterrent or anti-embolism or TED) adj3 (stocking\* or hose or hosiery or device\*)).tw.
15. (prophylaxis or prophylactic).tw.
16. pc.fs.
17. (prevent\* or reduce or reduction or diminish or decrease\* or inhibit\*).tw.
18. or/9-17
19. exp Medical Order Entry Systems/
20. exp Reminder Systems/
21. exp Drug Therapy, Computer-Assisted/
22. (("computeri?ed physician" or system) adj5 "order entry").tw.
23. CPOE.tw.
24. ((computeri?ed or automat\* or medicat\* or electronic\*) adj5 (alert\* or reminder\*)).tw.
25. sticker?.tw.
26. prescription aid?.tw.

27. exp Decision Support Systems, Clinical/
28. decision support.tw.
29. CDS.tw.
30. e-iatrogenesis.tw.
31. alert fatigue.tw.
32. electronic tool?.tw.
33. exp Guideline/
34. exp Guidelines as Topic/
35. exp Guideline Adherence/
36. exp Clinical Protocols/
37. protocol\*.tw.
38. guideline\*.tw.
39. adhere\*.tw.
40. (comply or compliance).tw.
41. or/19-40
42. exp Inpatients/ or exp Hospitalization/ or exp Hospitals/
43. (inpatient\* or "in?patient\*").tw.
44. exp Adolescent, Hospitalized/ or exp Child, Hospitalized/
45. (hospitali?e\* or hospitali?ation).tw.
46. (admitted adj3 (hospital or patient\*)).tw.
47. ("high risk" or "at risk").tw.
48. or/42-47
49. thromboprophyla\*.mp.
50. 8 and 18 and 41 and 48
51. 48 and 49
52. 50 or 51
53. limit 52 to yr="1980 -Current"

## 2. Embase Ovid

1. exp thrombosis prevention/
2. exp embolism prevention/
3. (thrombosis or thrombotic or thrombus or thrombi or thromboembol\*).tw.
4. (emboli\* or embolus).tw.
5. (phlebothrombo\* or phlebitis).tw.
6. exp blood clotting/
7. clot.tw.
8. (DVT or VTE or PE).ti,ab.
9. or/1-8
10. exp \*anticoagulant agent/
11. anticoagulant\*.tw.
12. (hydroxycoumarins or acenocoumarol or acenocoumar\* or minisintrom or nicoumalone or s?nc?umar or sintrom or s?nthrom\* or ancrod or ancrod or arvin or venacil or agkistrodon or arwinor or (blood adj3 coagulat\* adj3 inhibit\*) or "citric acid" or uralyt or dalteparin or tedelparin or fr-860 or fr860 or dalteparin or kabi2165 or kabi-2165 or fragmin\* or "dermatan sulfate" or chondroitin or dextran or dextrans or hemodex or promit or macrodex or saviosol or rheodextran or polyglucin or hyskon or rheomacrodex or infukoll or rheopolyglucin or rheoisodex or rondex or dic?umarol or dicoumarin or bishydroxycoumarin or edetic or tetracemate or calcitetracemate or edta or ethylenedinitrilotetraacetic or edetate or (calcium adj3 tetacine) or versenate or coprin or edathamil or versene or dinitrilotetraacetate or "chelaton 3" or enoxaparin\* or pk10169 or "pk

10169" or emt-967 or emt96\* or clexane or lovenox or emt-966 or (ethyl adj3 biscoumacetate) or ethyldicoumarol or pelentan or tromexan or carbethoxydicoumarol or foy or gabexate or heparin\* or at?eroid\* or liquaemin or nadroparin\* or fraxiparin\* or cy-216 or cy216 or "pentosan sulfuric polyester" or "pentosan sulphuric polyester" or ((polysulfate or polysulphate) adj sodium adj pentosan\*) or ((sulfuric or sulphuric) adj polyester adj pentosan\*) or fibrocid or ((hoe or bay or hoe-bay) adj "946") or ((pentosan\* or polypentose or xylan) adj (sulphate or sulfate or sp54 or sp-54 or polysulfate\* or polysulphate\*)) or pz68 or pz-68 or elmiron or hemoclar or phenindione or pindione or phenylene or fenilin or phenylindanedione or dindevan or phenprocoumon or falithrom or phenprogramma or phenprocoumalol or marcumar or phenylpropylhydroxycumarinum or phenprocoumarol or liquamar or marcoumar or "protein c" or "protein s" or warfarin marevan or coumadin\* or warfant or aldoumar or tedicumar or "beta 2-glycoprotein i" or apo-h or anticardiolipin or "apolipoprotein h" or ec-vmfa or "endothelial cell viability maintaining factor" or "beta(2)gpi").tw.

13. exp compression stocking/  
14. ((compression\* or thromboembolism-deterrent or anti-embolism or TED) adj3 (stocking\* or hose or hosiery)).tw.  
15. (prophylaxis or prophylactic).tw.  
16. pc.fs.  
17. (prevent\* or reduce or reduction or diminish or decrease\* or inhibit\*).tw.  
18. or/10-17  
19. exp hospital information system/  
20. exp reminder system/  
21. exp computer assisted drug therapy/  
22. (("computeri?ed physician" or system) adj5 "order entry").tw.  
23. CPOE.tw.  
24. ((computeri?ed or automat\* or medicat\* or electronic\*) adj5 (alert\* or reminder\*)).tw.  
25. sticker\*.tw.  
26. prescription aid\*.tw.  
27. exp decision support system/  
28. "decision support".tw.  
29. CDS.tw.  
30. e-iatrogenesis.tw.  
31. alert fatigue.tw.  
32. electronic tool\*.tw.  
33. exp practice guideline/  
34. exp clinical protocol/  
35. (protocol\* or guideline\* or adhere\*).tw.  
36. (comply or compliance).tw.  
37. or/19-36  
38. exp hospital patient/ or exp hospitalization/ or (\*exp \* hospital/ and exp patient/)  
39. (inpatient\* or "in?patient").tw.  
40. (hospitali?e\* or hospitali?ation).tw.  
41. (admitted adj3 (hospital or patient\*)).tw.  
42. ("high risk" or "at risk").tw.  
43. or/38-42  
44. thromboprophyla\*.mp.  
45. 9 and 18 and 37 and 43  
46. 43 and 44  
47. 45 or 46  
48. limit 47 to yr="1980 -Current"

### 3. BIOSIS previews Ovid

1. (thrombosis or thrombotic or thrombus or thrombi or thromboembol\*).mp.
2. (emboli\* or embolus).mp.
3. (phlebothrombo\* or phlebitis).mp.
4. clot\*.mp.
5. (DVT or VTE or PE).tw.
6. or/1-5
7. anticoagulant\*.mp.
8. (hydroxycoumarins or acenocoumarol or acenocoumar\* or minisintrom or nicoumalone or s?nc?umar or sintrom or s?nthrom\* or ancrod or ancrod or arvin or venacil or agkistrodon or arwinor or (blood adj3 coagulat\* adj3 inhibit\*) or "citric acid" or uralyt or dalteparin or tedelparin or fr-860 or fr860 or dalteparin or kabi2165 or kabi-2165 or fragmin\* or "dermatan sulfate" or chondroitin or dextran or dextrans or hemodex or promit or macrodex or saviosol or rheodextran or polyglucin or hyskon or rheomacrodex or infukoll or rheopolyglucin or rheoisodex or rondex or dic?umarol or dicoumarin or bishydroxycoumarin or edetic or tetracemate or calcitetracemate or edta or ethylenedinitrilotetraacetic or edetate or (calcium adj3 tetacine) or versenate or coprin or edathamil or versene or dinitrilotetraacetate or "chelaton 3" or enoxaparin\* or pk10169 or "pk 10169" or emt-967 or emt96\* or clexane or lovenox or emt-966 or (ethyl adj3 biscoumacetate) or ethyldicoumarol or pelentan or tromexan or carbethoxydicoumarol or foy or gabexate or heparin\* or at?eroid\* or liquaemin or nadroparin\* or fraxiparin\* or cy-216 or cy216 or "pentosan sulfuric polyester" or "pentosan sulphuric polyester" or ((polysulfate or polysulphate) adj sodium adj pentosan\*) or ((sulfuric or sulphuric) adj polyester adj pentosan\*) or fibrocid or ((hoe or bay or hoe-bay) adj "946") or ((pentosan\* or polypentose or xylan) adj (sulphate or sulfate or sp54 or sp-54 or polysulfate\* or polysulphate\*)) or pz68 or pz-68 or elmiron or hemoclar or phenindione or pindione or phenylene or fenilin or phenylindanedione or dindevan or phenprocoumon or falithrom or phenprogramma or phenprocoumalol or marcumar or phenylpropylhydroxycoumarinum or phenprocoumarol or liquamar or marcoumar or "protein c" or "protein s" or warfarin marevan or coumadin\* or warfant or aldoumar or tedicoumar or "beta 2-glycoprotein i" or apo-h or anticardiolipin or "apolipoprotein h" or ec-vmfa or "endothelial cell viability maintaining factor" or "beta(2)gpi").tw.
9. ((compression\* or thromboembolism-deterrent or anti-embolism or TED) adj3 (stocking\* or hose or hosiery)).mp.
10. (prophylaxis or prophylactic).mp.
11. (prevent\* or reduce or reduction or diminish or decrease\* or inhibit\*).mp.
12. or/7-11
13. (("computeri?ed physician" or system) adj5 "order entry").tw.
14. CPOE.tw.
15. ((computeri?ed or automat\* or medicat\* or electronic\*) adj5 (alert\* or reminder\*)).tw.
16. sticker\*.tw.
17. prescription aid\*.tw.
18. "decision support".tw.
19. CDS.tw.
20. e-iatrogenesis.tw.
21. alert fatigue.tw.
22. electronic tool\*.tw.
23. (guideline\* or protocol\* or adhere\*).tw.
24. (comply or compliance).tw.
25. or/13-24
26. (inpatient\* or "in?patient").tw.
27. (hospitali?e\* or hospitali?ation).tw.

28. (admit\* adj3 (hospital or patient\*)).tw.
29. ("high risk" or "at risk").tw.
30. or/26-29
31. thromboprophyla\*.mp.
32. 6 and 12 and 25 and 30
33. 30 and 31
34. 32 or 33

#### 4. CINAHL

S46 S44 OR S45  
 S45 S42 AND S43  
 S44 S8 AND S15 AND S32 AND S42  
 S43TI thromboprophyla\* OR AB thromboprophyla\*  
 S42 S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39 OR S40 OR S41  
 S41TI ("high risk" OR "at risk") OR AB ("high risk" OR "at risk")  
 S40TI (admitted N3 (hospital or patient\*)) OR AB (admitted N3 (hospital or patient\*))  
 S39TI (hospitali?e\* OR hospitali?ation) OR AB (hospitali?e\* OR hospitali?ation)  
 S38(MH "Child, Hospitalized")  
 S37(MH "Adolescent, Hospitalized")  
 S36TI (inpatient\* OR in?patient\*) OR AB (inpatient\* OR in?patient\*)  
 S35(MH "Hospitals+")  
 S34(MH "Hospitalization+")  
 S33(MH "Inpatients")  
 S32 S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26  
 OR S27 OR S28 OR S29 OR S30 OR S31  
 S31TI (protocol\* or guideline\* OR adhere\*) OR AB (protocol\* or guideline\* OR adhere\*)  
 S30(MH "Practice Guidelines")  
 S29TI electronic tool\* OR AB electronic tool\*  
 S28TI alert fatigue OR AB alert fatigue  
 S27TI e-iatrogenesis OR AB e-iatrogenesis  
 S26TI CDS OR AB CDS  
 S25TI decision support\* OR AB decision support\*  
 S24(MH "Decision Support Systems, Clinical")  
 S23TI prescription aid\* OR AB prescription aid\*  
 S22TI sticker\* OR AB sticker\*  
 S21TI ((computeri?ed or automat\* or medicat\* or electronic\*) N5 (alert\* or reminder\*)) OR AB  
 ((computeri?ed or automat\* or medicat\* or electronic\*) N5 (alert\* or reminder\*))  
 S20TI CPOE OR AB CPOE  
 S19TI (("computeri?ed physician" or system) N5 "order entry") OR AB (("computeri?ed  
 physician" or system) N5 "order entry")  
 S18(MH "Drug Therapy, Computer Assisted")  
 S17(MH "Reminder Systems")  
 S16(MH "Electronic Order Entry")  
 S15 S9 OR S10 OR S11 OR S12 OR S13 OR S14  
 S14TI (prevent\* or reduce or reduction or diminish or decrease\* or inhibit\*) OR AB (prevent\* or  
 reduce or reduction or diminish or decrease\* or inhibit\*)  
 S13TI (prophylaxis or prophylactic) OR AB (prophylaxis or prophylactic)  
 S12TI ((compression\* or thromboembolism-deterrent or anti-embolism or TED) N3 (stocking\* or  
 hose or hosiery or device\*)) OR AB ((compression\* or thromboembolism-deterrent or anti-  
 embolism or TED) N3 (stocking\* or hose or hosiery or device\*))

S11(MH "Compression Garments")  
 S10TI anticoagulant\* OR AB anticoagulant\*  
 S9(MH "Anticoagulants+")  
 S8 S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7  
 S7TX (DVT OR VTE OR PE) OR AB (DVT OR VTE OR PE)  
 S6TX (clot or clots) OR AB (clot or clots)  
 S5TX (phlebothrombo\* or phlebitis) OR AB (phlebothrombo\* or phlebitis)  
 S4TX (emboli\* OR embolus) OR AB (emboli\* or embolus)  
 S3TX (thrombosis or thrombotic or thrombus or thrombi or thromboembol\*) OR AB (thrombosis or thrombotic or thrombus or thrombi or thromboembol\*)  
 S2(MH "Embolism+/PC")  
 S1(MH "Thrombosis+/PC")

## 5. WEB OF SCIENCE

#1 TS=(thrombosis or thrombotic or thrombus or thrombi or thromboembol\* OR emboli\* OR embolus OR phlebothrombo\* or phlebitis OR clot OR DVT OR VTE OR PE)  
 #2 TS=(anticoagulant\* OR hydroxycoumarins or acenocoumarol or acenocoumar\* or minisintrom or nicoumalone or s?nc?umar or sintrom or s?nthrom\* or ancrod or ancrod or arvin or venacil or agkistrodon or arwinor or (blood NEAR/3 coagulat\* NEAR/3 inhibit\*) or "citric acid" or uralyt or dalteparin or tedelparin or fr-860 or fr860 or dalteparin or kabi2165 or kabi-2165 or fragmin\* or "dermatan sulfate" or chondroitin or dextran or dextrans or hemodex or promit or macrodex or saviosol or rheodextran or polyglucin or hyskon or rheomacrodex or infukoll or rheopolyglucin or rheoisodex or rondex or dic?umarol or dicoumarin or bishydroxycoumarin or edetic or tetracemate or calcitetracemate or edta or ethylenedinitrilotetraacetic or edetate or (calcium NEAR/3 tetacine) or versenate or coprin or edathamil or versene or dinitrilotetraacetate or "chelaton 3" or enoxaparin\* or pk10169 or "pk 10169" or emt-967 or emt96\* or clexane or lovenox or emt-966 or (ethyl NEAR/3 biscoumacetate) or ethyldicoumarol or pelentan or tromexan or carbethoxydicoumarol or foy or gabexate or heparin\* or at?eroid\* or liquaemin or nadroparin\* or fraxiparin\* or cy-216 or cy216 or "pentosan sulfuric polyester" or "pentosan sulphuric polyester" or ((polysulfate or polysulphate) NEAR/1 sodium NEAR/1 pentosan\*) or ((sulfuric or sulphuric) NEAR/1 polyester NEAR/1 pentosan\*) or fibrocid or ((hoe or bay or hoe-bay) NEAR/1 "946") or ((pentosan\* or polypentose or xylan) NEAR/1 (sulphate or sulfate or sp54 or sp-54 or polysulfate\* or polysulphate\*)) or pz68 or pz-68 or elmiron or hemoclar or phenindione or pindione or phenylene or fenilin or phenylindanedione or dindevan or phenprocoumon or falithrom or phenprogramma or phenprocoumalol or marcumar or phenylpropylhydroxycoumarinum or phenprocoumarol or liquamar or marcoumar or "protein c" or "protein s" or warfarin marevan or coumadin\* or warfant or aldoumar or tedicoumar or "beta 2-glycoprotein i" or apo-h or anticardiolipin or "apolipoprotein h" or ec-vmfa or "endothelial cell viability maintaining factor" or "beta(2)gpi" OR ((compression\* or thromboembolism-deterrent or anti-embolism or TED) NEAR/3 (stocking\* or hose or hosiery)) OR prophylaxis or prophylactic or prevent\* or reduce or reduction or diminish or decrease\* or inhibit\*)  
 #3 TS=(((computeri?ed physician" or system) NEAR/5 "order entry") OR CPOE OR ((computeri?ed or automat\* or medicat\* or electronic\*) NEAR/5 (alert\* or reminder\*)) or sticker\* OR "prescription aid\*" OR "decision support" OR CDS OR e-iatrogenesis OR "alert fatigue" OR "electronic tool\*" OR guideline\* or protocol\* OR adhere\* OR comply or compliance)  
 #4 TS=(inpatient\* OR "in-patient\*" or hospitali?e\* or hospitali?ation or (admitted NEAR/3 (hospital\* or patient\*)) OR "high risk" or "at risk")  
 #5 TS=(thromboprophyla\*)  
 #6 #4 AND #3 AND #2 AND #1

#7 #5 AND #4  
#8 #7 OR #6

## 6. LILACS

((thrombosis or thrombotic or thrombus or thrombi or thromboembol\* or phlebothrombo\* or phlebitis or clot\* or DVT or VTE) AND (prophylaxis or prophylactic or prevent\* or reduce or reduction or diminish or decrease\* or inhibit\*)) OR thromboprophyla\*

## 7. PubMed

#65, "Search #64 NOT medline[sb]"  
#64, "Search #62 OR #63"  
#63, "Search #60 AND #61"  
#62, "Search #15 AND #27 AND #52 AND #60"  
#61, "Search thromboprophyla\*[tw]"  
#60, "Search #52 OR #53 OR #54 OR #55 OR #56 OR #58 OR #59"  
#59, "Search high risk[tw] or at risk[tw]"  
#58, "Search admitted[tw] AND (hospital[tw] or patient[tw] or patients[tw])"  
#56, "Search hospitalise\*[tw] or hospitalisation[tw] or hospitalize\*[tw] or hospitalization[tw]"  
#55, "Search Adolescent, Hospitalized[Mesh] or Child, Hospitalized[Mesh]"  
#54, "Search inpatient[tw] or inpatients[tw] or in-patient[tw] or in-patients[tw]"  
#53, "Search Inpatients[Mesh] or Hospitalization[Mesh] or Hospitals[Mesh]"  
#52, "Search #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 OR #41 OR #42 OR #43 OR #44 OR #45 OR #46 OR #47 OR #48 OR #49 OR #50 OR #51"  
#51, "Search comply[tw] or compliance[tw]"  
#50, "Search adhere\*[tw]"  
#49, "Search guideline\*[tw]"  
#48, "Search protocol\*[tw]"  
#47, "Search Clinical Protocols[Mesh]"  
#46, "Search Guideline Adherence[Mesh]"  
#45, "Search Guidelines as Topic[Mesh]"  
#44, "Search Guideine[Mesh] Schema: all"  
#43, "Search Guideine[Mesh]"  
#42, "Search electronic tool\*[tw]"  
#41, "Search alert fatigue[tw]"  
#40, "Search e-iatrogenesis[tw]"  
#39, "Search CDS[tw]"  
#38, "Search decision support[tw]"  
#37, "Search ""Decision Support Systems, Clinical""[Mesh]"  
#36, "Search prescription aid\*[tw]"  
#35, "Search sticker\*[tw]"  
#34, "Search ((computerised or computerized or automat\* or medicat\* or electronic\*) AND (alert\* or reminder\*)) [tw]"  
#33, "Search CPOE[tw]"  
#32, "Search ((""computerised physician"" or ""computerized physician"" or system) AND ""order entry"" ) [tw]"  
#31, "Search ""Drug Therapy, Computer-Assisted""[Mesh]"  
#30, "Search ""Reminder Systems""[Mesh]"



#29,"Search ""Medical Order Entry Systems""[Mesh]"

#27,"Search #16 OR #17 OR #19 OR #21 OR #23 OR #24 OR #25 OR #26"

#26,"Search prevent\*[tw] or reduce[tw] or reduction[tw] or diminish[tw] or decrease\*[tw] or inhibit\*[tw]"

#25,"Search prophylaxis[tw] or prophylactic[tw]"

#24,"Search ((compression\* or thromboembolism-deterrent or anti-embolism or TED) AND (stocking\* or hose or hosiery or device\*)) [tw]"

#23,"Search ""Intermittent Pneumatic Compression Devices""[Mesh]"

#21,"Search ""Stockings, Compression""[Mesh]"

#19,"Search hydroxycoumarins[tw] or acenocoumarol[tw] or acenocoumar\*[tw] or minisintrom[tw] or nicoumalone[tw] or syncumar[tw] or sintrom[tw] or sinthrom\*[tw] or synthrom\*[tw] or ancrod[tw] or arvin[tw] or venacil[tw] or agkistrodon[tw] or arwinor[tw] or blood coagulation inhibitor[tw] or blood coagulation inhibitors[tw] or citric acid[tw] or uralyt[tw] or dalteparin[tw] or tedelparin[tw] or fr-860[tw] or fr860[tw] or dalteparin[tw] or kabi2165[tw] or kabi-2165[tw] or fragmin\*[tw] or ""dermatan sulfate""[tw] or chondroitin[tw] or dextran[tw] or dextrans[tw] or hemodex[tw] or promit[tw] or macrodex[tw] or saviosol[tw] or rheodextran[tw] or polyglucin[tw] or hyskon[tw] or rheomacrodex[tw] or infukoll[tw] or rheopolyglucin[tw] or rheoisodex[tw] or rondex[tw] or dicumarol[tw] or dicoumarol[tw] or dicoumarin[tw] or bishydroxycoumarin[tw] or edetic[tw] or tetracemate[tw] or calcitetracemate[tw] or edta[tw] or ethylenedinitrilotetraacetic[tw] or edetate[tw] or (calcium AND tetacine)[tw] or versenate[tw] or coprin[tw] or edathamil[tw] or versene[tw] or dinitrilotetraacetate[tw] or ""chelaton 3""[tw] or enoxaparin\*[tw] or pk10169[tw] or ""pk 10169""[tw] or emt-967[tw] or emt96\*[tw] or clexane[tw] or lovenox[tw] or emt-966[tw] or ""ethyl biscoumacetate""[tw] or ethyldicoumarol[tw] or pelentan[tw] or tromexan[tw] or carbethoxydicoumarol[tw] or foy[tw] or gabexate[tw] or heparin\*[tw] or ateroid\*[tw] or atheroid\*[tw] or liquaemin[tw] or nadroparin\*[tw] or fraxiparin\*[tw] or cy-216[tw] or cy216[tw] or ""pentosan sulfuric polyester""[tw] or ""pentosan sulphuric polyester""[tw] or ((polysulfate or polysulphate) AND sodium AND pentosan\*)[tw] or ((sulfuric or sulphuric) AND polyester AND pentosan\*)[tw] or fibrocid[tw] or ((hoe or bay or hoe-bay) AND ""946""[tw] or ((pentosan\* or polypentose or xylan)[tw] AND (sulphate or sulfate or sp54 or sp-54 or polysulfate\* or polysulphate\*)) [tw] or pz68[tw] or pz-68[tw] or elmiron[tw] or hemoclar[tw] or phenindione[tw] or pindione[tw] or phenylene[tw] or fenilin[tw] or phenylindanedione[tw] or dindevan[tw] or phenprocoumon[tw] or falithrom[tw] or phenprogamma[tw] or phenprocoumalol[tw] or marcumar[tw] or phenylpropylhydroxycumarinum[tw] or phenprocoumarol[tw] or liquamar[tw] or marcoumar[tw] or ""protein c""[tw] or ""protein s""[tw] or ""warfarin marevan""[tw] or coumadin\*[tw] or warfant[tw] or aldoumar[tw] or tedicumar[tw] or ""beta 2-glycoprotein i""[tw] or apo-h[tw] or anticardiolipin[tw] or ""apolipoprotein h""[tw] or ec-vmfa[tw] or ""endothelial cell viability maintaining factor""[tw] or ""beta(2)gpi""[tw]"

#17,"Search anticoagulant\*[tw]"

#16,"Search ""Anticoagulants""[Mesh]"

#15,"Search #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #14"

#14,"Search DVT[tiab] OR VTE[tiab] OR PE[tiab]"

#12,"Search clot[tw]"

#11,"Search phlebothrombo\*[tw] or phlebitis[tw]"

#10,"Search emboli[tw] or embolus[tw]"

#9,"Search thrombosis[tw] or thrombotic[tw] or thrombus[tw] or thrombi[tw] or thromboembol\*[tw]"

#8,"Search ""Embolism/prevention and control""[Mesh]"

#7,"Search ""Thrombosis/prevention and control""[Mesh]"

**Table S1. Summary of study quality**

<b>Trial</b>	<b>Quantitative scores</b>	<b>Overall ROB</b>
Anderson 1994	-1	Unclear
Overhage 1996	-1	Unclear
Dexter 2001	0	Unclear
Kucher 2005	+2	Low
Fontaine 2006	0	Unclear
Labarere 2007	0	Unclear
Piazza 2009	+3	Low
Garcia 2009	-2	High
Hinchey 2010	-4	High
Chapman 2011	0	Unclear
Pai 2013	+1	Unclear
Cavalcanti 2016	+1	Unclear
Roy 2016	+1	Unclear

For each of the seven ROB domains, a negative score (-1) was assigned for each high ROB response, a score of zero was assigned for each unclear ROB response, and a positive score was assigned for each low ROB response.

Summary scores of less than -1 were considered as high ROB, summary scores of zero were considered as unclear ROB, and summary scores of greater than +1 were considered low ROB. Only two of the included studies were of low quality. High ROB was mainly related to selection, performance, attrition, reporting, and other biases.

Figure S1

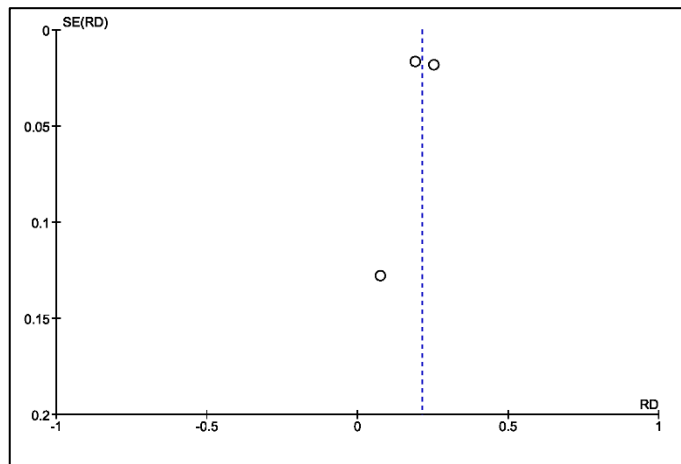


Figure S1, legend: Funnel plot of comparison: Alerts versus standard care, outcome: Received prophylaxis.

Figure S2

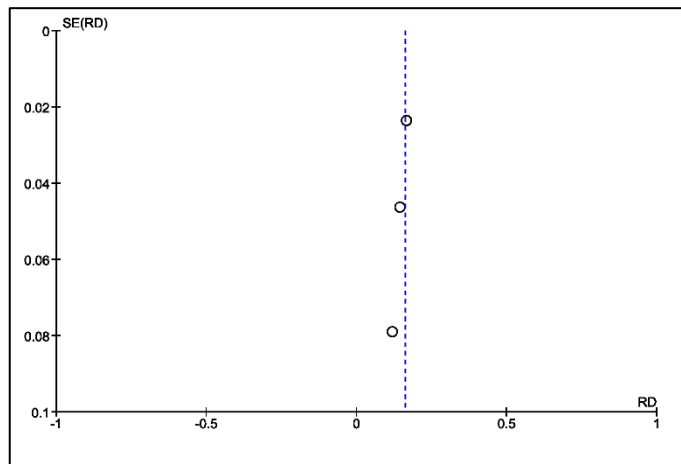


Figure S2, legend: Funnel plot of comparison: Alerts versus standard care, outcome: Received appropriate prophylaxis.

Figure S3

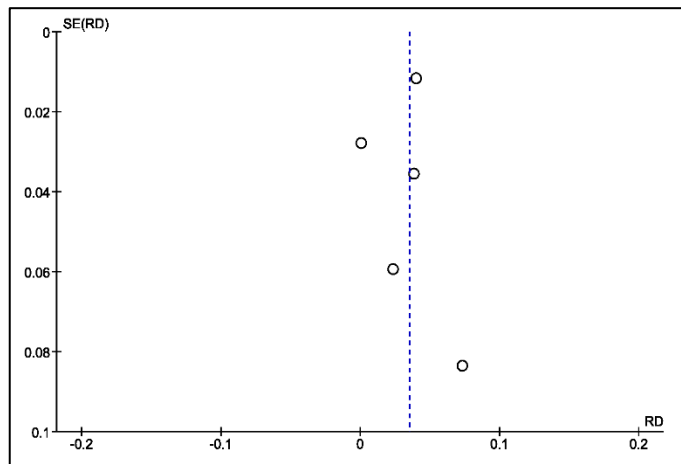


Figure S3, legend: Funnel plot of comparison: Multifaceted interventions versus standard care or another intervention, outcome: Received prophylaxis (adjusted)