

Search (((((((((((((((((((((((((((((((((((Pregnant Woman[Title/Abstract]) OR Pregnant Women[Title/Abstract]) OR Woman, Pregnant[Title/Abstract]) OR Women, Pregnant[Title/Abstract]) OR Pregnant patient[Title/Abstract]) OR Pregnancy[Title/Abstract]) OR Pregnant[Title/Abstract]) OR Pregnancies[Title/Abstract]) OR Gestation[Title/Abstract]) OR Gravidity) OR Gravidities) OR Maternity) OR Fetation) OR Conception)) OR Pregnan[Title/Abstract]) OR Obstetric[Title/Abstract]) OR Childbirth[Title/Abstract]) OR Parturition[Title/Abstract]) OR Birth[Title/Abstract]) OR Childbirth[Title/Abstract]) OR Fetus[Title/Abstract]) OR Fetuses[Title/Abstract]) OR Fetal[Title/Abstract]) OR Maternal-Fetal[Title/Abstract]) OR Perinatal[Title/Abstract]) OR Newborn[Title/Abstract]) OR Infant[Title/Abstract]) OR Newborns[Title/Abstract]) OR Newborn[Title/Abstract]) OR Neonate[Title/Abstract]) OR Neonates[Title/Abstract]) OR Placenta[Title/Abstract]) OR Placentas[Title/Abstract]) OR Placentome[Title/Abstract]) OR Placentoma[Title/Abstract])) AND (((((((((((((((((((((((((((((((((((Heart Valve[Title/Abstract]) OR Heart Valves[Title/Abstract]) OR Valve, Heart[Title/Abstract]) OR Valves, Heart[Title/Abstract]) OR Cardiac Valves[Title/Abstract]) OR Cardiac Valve[Title/Abstract]) OR Valve, Cardiac[Title/Abstract]) OR Valves, Cardiac[Title/Abstract]) OR Mechanical Valve[Title/Abstract]) OR Valve Replacement[Title/Abstract]) OR Heart Valve Prosthesis[Title/Abstract]) OR Heart Valve Prostheses[Title/Abstract]) OR Prostheses, Heart Valve[Title/Abstract]) OR Cardiac Valve Prosthesis[Title/Abstract]) OR Cardiac Valve Prostheses[Title/Abstract]) OR Prostheses, Cardiac Valve[Title/Abstract]) OR Prosthesis, Cardiac Valve[Title/Abstract]) OR Valve Prostheses, Cardiac[Title/Abstract]) OR Valve Prosthesis, Cardiac[Title/Abstract]) OR Mechanical Heart Valves[Title/Abstract]) OR Heart Valve Replacement[Title/Abstract]) OR Artificial Valve[Title/Abstract]) OR Artificial Heart Valve[Title/Abstract])) OR Valve[Title/Abstract]) OR Artificial[Title/Abstract]) OR Mechanical[Title/Abstract]) OR Prostheses[Title/Abstract]) OR Prosthesis[Title/Abstract]) OR Replacement[Title/Abstract])) OR Heart[Title/Abstract])) OR Cardiac[Title/Abstract])) AND

(((Anticoagulants[Title/  
 Abstract])) OR Anticoagulation Agents[Title/Abstract])) OR Agents,  
 Anticoagulation[Title/Abstract])) OR Anticoagulant Agents[Title/Abstract])) OR  
 Agents, Anticoagulant[Title/Abstract])) OR Anticoagulant Drugs[Title/Abstract])) OR  
 Drugs, Anticoagulant[Title/Abstract])) OR Anticoagulant[Title/Abstract])) OR Indirect  
 Thrombin Inhibitors[Title/Abstract])) OR Inhibitors, Indirect Thrombin[Title/Abstract]))  
 OR Thrombin Inhibitors, Indirect[Title/Abstract])) OR Vitamin K  
 antagonists[Title/Abstract])) OR VKA[Title/Abstract])) OR Warfarin[Title/Abstract]))  
 OR 4-Hydroxy-3-(3-oxo-1-phenylbutyl)-2H-1-benzopyran-2-one[Title/Abstract])) OR  
 Apo-Warfarin[Title/Abstract])) OR Aldocumar[Title/Abstract])) OR  
 Gen-Warfarin[Title/Abstract])) OR Coumadin[Title/Abstract])) OR  
 Marevan[Title/Abstract])) OR Warfarin Potassium[Title/Abstract])) OR Potassium,  
 Warfarin[Title/Abstract])) OR Warfarin Sodium[Title/Abstract])) OR Sodium,  
 Warfarin[Title/Abstract])) OR Coumadine[Title/Abstract])) OR  
 Tedicumar[Title/Abstract])) OR Acenocoumarol[Title/Abstract])) OR  
 Nicoumalone[Title/Abstract])) OR Acenocoumarin[Title/Abstract])) OR  
 phenprocoumon[Title/Abstract])) OR Phenprocoumalol[Title/Abstract])) OR  
 Heparins[Title/Abstract])) OR Heparin[Title/Abstract])) OR Unfractionated  
 Heparin[Title/Abstract])) OR UFH[Title/Abstract])) OR Heparin,  
 Unfractionated[Title/Abstract])) OR Heparinic Acid[Title/Abstract])) OR  
 Liquaemin[Title/Abstract])) OR Sodium Heparin[Title/Abstract])) OR Heparin,  
 Sodium[Title/Abstract])) OR Heparin Sodium[Title/Abstract])) OR  
 Alpha-Heparin[Title/Abstract])) OR Alpha Heparin[Title/Abstract])) OR  
 LMWH[Title/Abstract])) OR Heparin, Low Molecular Weight[Title/Abstract])) OR  
 Low Molecular Weight Heparin[Title/Abstract])) OR Low-Molecular-Weight  
 Heparin[Title/Abstract])) OR Danaparoid[Title/Abstract])) OR  
 Danaproid[Title/Abstract])) OR Danaparoid Sodium[Title/Abstract])) OR Danaproid  
 Sodium[Title/Abstract])) OR Aspirin[Title/Abstract])) OR Acetylsalicylic  
 Acid[Title/Abstract])) OR Acid, Acetylsalicylic[Title/Abstract])) OR  
 2-(Acetyloxy)benzoic Acid[Title/Abstract])) OR Acylpyrin[Title/Abstract])) OR  
 ASA[Title/Abstract])) OR New Oral Anticoagulants[Title/Abstract])) OR  
 NOACs[Title/Abstract])) OR Direct Oral Anticoagulants[Title/Abstract])) OR  
 DOACs[Title/Abstract])) OR Dabigatran[Title/Abstract])) OR

Rivaroxaban[Title/Abstract]) OR Apixaban[Title/Abstract]) OR  
 Edoxaban[Title/Abstract]) OR Fondaparinux[Title/Abstract]) OR Fondaparinux  
 Sodium[Title/Abstract]) OR Argatroban[Title/Abstract]) OR Hirudin[Title/Abstract])  
 OR Hirudins[Title/Abstract]) OR Bivalirudin[Title/Abstract]) OR  
 Lepirudin[Title/Abstract])) OR Enoxaparin[Title/Abstract]) OR  
 Nadroparin[Title/Abstract]) OR Fraxiparin[Title/Abstract]) OR  
 Xarelto[Title/Abstract]) OR Ximelagatran[

**Embase**< to April 3 ,2019>

((('pregnant woman'/exp OR 'pregnant women':ab,ti OR 'woman, pregnant':ab,ti OR  
 'women, pregnant':ab,ti OR 'pregnant patient':ab,ti OR 'pregnant':ab,ti OR  
 'pregnancy':ab,ti OR 'pregnancies':ab,ti OR 'gestation':ab,ti OR 'gravidity':ab,ti OR  
 'gravidities':ab,ti OR 'maternity':ab,ti OR 'fetation':ab,ti OR 'conception':ab,ti OR  
 'pregnan':ab,ti OR 'obstetric':ab,ti OR 'childbirth':ab,ti OR 'parturition':ab,ti OR  
 'birth':ab,ti OR 'childbirth':ab,ti) OR ('fetus':ab,ti OR 'fetuses':ab,ti OR 'fetal':ab,ti OR  
 'maternal-fetal':ab,ti OR 'perinatal':ab,ti OR 'newborn':ab,ti OR 'infant':ab,ti OR  
 'newborns':ab,ti OR 'neonate':ab,ti OR 'neonates':ab,ti OR 'placenta':ab,ti OR  
 'placentas':ab,ti OR 'placentome':ab,ti OR 'placenta':ab,ti)) AND (('anticoagulant  
 agent':ab,ti OR 'anticoagulants':ab,ti OR 'agents, anticoagulation':ab,ti OR  
 'anticoagulation agents':ab,ti OR 'agents, anticoagulant':ab,ti OR 'anticoagulant  
 drugs':ab,ti OR 'drugs, anticoagulant':ab,ti OR 'anticoagulant':ab,ti OR 'indirect  
 thrombin inhibitors':ab,ti OR 'inhibitors, indirect thrombin':ab,ti OR 'thrombin  
 inhibitors, indirect':ab,ti) OR ('vitamin k antagonists':ab,ti OR 'vka':ab,ti OR  
 'warfarin':ab,ti OR '4-hydroxy-3-(3-oxo-1-phenylbutyl)-2h-1-benzopyran-2-one':ab,ti  
 OR 'apo-warfarin':ab,ti OR 'aldocumar':ab,ti OR 'gen-warfarin':ab,ti OR 'warfant':ab,ti  
 OR 'coumadin':ab,ti OR 'marevan':ab,ti OR 'warfarin potassium':ab,ti OR 'potassium,  
 warfarin':ab,ti OR 'warfarin sodium':ab,ti OR 'sodium, warfarin':ab,ti OR  
 'coumadine':ab,ti OR 'tedicumar':ab,ti OR 'acenocoumarol':ab,ti OR  
 'nicoumalone':ab,ti OR 'acenocoumarin':ab,ti OR 'phenprocoumon':ab,ti OR  
 'phenprocoumalol':ab,ti) OR ('heparin':ab,ti OR 'heparins':ab,ti OR 'unfractionated  
 heparin':ab,ti OR 'ufh':ab,ti OR 'heparin, unfractionated':ab,ti OR 'heparinic acid':ab,ti  
 OR 'liquaemin':ab,ti OR 'sodium heparin':ab,ti OR 'heparin, sodium':ab,ti OR 'heparin

sodium':ab,ti OR 'alpha-heparin':ab,ti OR 'alpha heparin':ab,ti OR 'enoxaparin':ab,ti OR 'nadroparin':ab,ti OR 'fraxiparin':ab,ti OR 'low molecular weight heparin':ab,ti OR 'lmwh':ab,ti OR 'heparin, low molecular weight':ab,ti OR 'low-molecular-weight heparin':ab,ti OR 'danaparoid':ab,ti OR 'danaproid':ab,ti OR 'danaparoid sodium':ab,ti OR 'danaproid sodium':ab,ti) OR ('acetylsalicylic acid':ab,ti OR 'aspirin':ab,ti OR 'acid, acetylsalicylic':ab,ti OR '2-(acetyloxy)benzoic acid':ab,ti OR 'acylpyrin':ab,ti OR 'asa':ab,ti) OR ('new oral anticoagulants':ab,ti OR 'noacs':ab,ti OR 'direct oral anticoagulants':ab,ti OR 'doacs':ab,ti OR 'dabigatran':ab,ti OR 'rivaroxaban':ab,ti OR 'apixaban':ab,ti OR 'edoxaban':ab,ti OR 'xarelto':ab,ti OR 'ximelagatran':ab,ti) OR ('fondaparinux'/exp OR 'fondaparinux sodium':ab,ti) OR ('argatroban'/exp OR 'hirudin'/exp OR 'hirudins':ab,ti OR 'bivalirudin':ab,ti OR 'lepirudin':ab,ti)) AND ('heart valve replacement'/exp OR 'valve':ab,ti OR 'heart valve':ab,ti OR 'heart valves':ab,ti OR 'valve, heart':ab,ti OR 'valves, heart':ab,ti OR 'cardiac valves':ab,ti OR 'cardiac valve':ab,ti OR 'valve, cardiac':ab,ti OR 'valves, cardiac':ab,ti OR 'mechanical valve':ab,ti OR 'valve replacement':ab,ti OR 'heart valve prosthesis':ab,ti OR 'heart valve prostheses':ab,ti OR 'prostheses, heart valve':ab,ti OR 'valve prostheses, heart':ab,ti OR 'valve prosthesis, heart':ab,ti OR 'prosthesis, heart valve':ab,ti OR 'cardiac valve prosthesis':ab,ti OR 'cardiac valve prostheses':ab,ti OR 'prostheses, cardiac valve':ab,ti OR 'prosthesis, cardiac valve':ab,ti OR 'valve prostheses, cardiac':ab,ti OR 'valve prosthesis, cardiac':ab,ti OR 'mechanical heart valves':ab,ti OR 'heart valve replacement':ab,ti OR 'artificial valve':ab,ti OR 'artificial heart valve':ab,ti)

## **OVID:**

EBM Reviews - Cochrane Database of Systematic Reviews<2005 to March 27, 2019>, EBM Reviews - ACP Journal Club <1991 to March 2019>, EBM Reviews - Database of Abstracts of Reviews of Effects <1st Quarter 2016>, EBM Reviews - Cochrane Clinical Answers <March 2019>, EBM Reviews - Cochrane Central Register of Controlled Trials <March 2019>, EBM Reviews - Cochrane Methodology Register <3rd Quarter 2012>, EBM Reviews - Health Technology Assessment <4th Quarter 2016>, EBM Reviews - NHS Economic Evaluation Database <1st Quarter 2016>

## Search Strategy:

- 
- 1 Valve.af,ab,kw,ti. (8402)
  - 2 Artificial.ab,kw,ti. (11951)
  - 3 Mechanical.ab,kw,ti. (18547)
  - 4 Prostheses.ab,kw,ti. (1641)
  - 5 Prosthesis.ab,kw,ti. (5645)
  - 6 Replacement.ab,kw,ti. (24066)
  - 7 Heart.ab,kw,ti. (116322)
  - 8 Cardiac.ab,kw,ti. (55124)
  - 9 Heart Valve.ab,kw,ti. (1100)
  - 10 Heart Valves.ab,kw,ti. (243)
  - 11 Valve, Heart.ab,kw,ti. (29)
  - 12 Valves, Heart.ab,kw,ti. (1)
  - 13 Cardiac Valves.ab,kw,ti. (35)
  - 14 Cardiac Valve.ab,kw,ti. (215)
  - 15 Valve, Cardiac.ab,kw,ti. (12)
  - 16 Valves, Cardiac.ab,kw,ti. (1)
  - 17 mechanical valve.ab,kw,ti. (79)
  - 18 valve replacement.ab,kw,ti. (2302)
  - 19 heart valve prosthesis.ab,kw,ti. (233)
  - 20 Heart Valve Prostheses.ab,kw,ti. (33)
  - 21 Prostheses, Heart Valve.ab,kw,ti. (0)
  - 22 Valve Prostheses, Heart.ab,kw,ti. (0)
  - 23 Valve Prosthesis, Heart.ab,kw,ti. (20)
  - 24 Prosthesis, Heart Valve.ab,kw,ti. (17)
  - 25 Cardiac Valve Prosthesis.ab,kw,ti. (1)
  - 26 Cardiac Valve Prostheses.ab,kw,ti. (0)
  - 27 Prostheses, Cardiac Valve.ab,kw,ti. (0)
  - 28 Prosthesis, Cardiac Valve.ab,kw,ti. (1)
  - 29 Valve Prostheses, Cardiac.ab,kw,ti. (0)
  - 30 Valve Prosthesis, Cardiac.ab,kw,ti. (1)
  - 31 mechanical heart valves.ab,kw,ti. (71)

- 32 heart valve replacement.ab,kw,ti. (337)
- 33 artificial valve.ab,kw,ti. (19)
- 34 artificial heart valve.ab,kw,ti. (12)
- 35 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or  
16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30  
or 31 or 32 or 33 or 34 (190001)
- 36 Pregnant Women.ab,kw,ti. (11301)
- 37 Pregnant Woman.ab,kw,ti. (3078)
- 38 Woman, Pregnant.ab,kw,ti. (14)
- 39 Women, Pregnant.ab,kw,ti. (151)
- 40 Pregnant patient.ab,kw,ti. (49)
- 41 Pregnant.ab,kw,ti. (17827)
- 42 Pregnancy.ab,kw,ti. (42184)
- 43 Pregnancies.ab,kw,ti. (5993)
- 44 Gestation.ab,kw,ti. (10292)
- 45 Gravidity.ab,kw,ti. (245)
- 46 Gravidities.ab,kw,ti. (6)
- 47 Maternity.ab,kw,ti. (1721)
- 48 Fetation.ab,kw,ti. (0)
- 49 Conception.ab,kw,ti. (1602)
- 50 Pregnant.ab,kw,ti. (30)
- 51 Obstetric.ab,kw,ti. (5169)
- 52 Childbirth.ab,kw,ti. (3642)
- 53 Parturition.ab,kw,ti. (224)
- 54 Birth.ab,kw,ti. (24389)
- 55 Childbirth.ab,kw,ti. (3642)
- 56 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 or 52 or 53 or 54 or 55 (70390)
- 57 Fetus.ab,kw,ti. (5027)
- 58 Fetuses.ab,kw,ti. (888)
- 59 Fetal.ab,kw,ti. (9129)
- 60 Maternal-Fetal.ab,kw,ti. (1622)
- 61 Perinatal.ab,kw,ti. (5214)

- 62 Newborn.ab,kw,ti. (11850)
- 63 Infant.ab,kw,ti. (21930)
- 64 Newborns.ab,kw,ti. (4279)
- 65 Newborn.ab,kw,ti. (11850)
- 66 Neonate.ab,kw,ti. (1381)
- 67 Neonates.ab,kw,ti. (6955)
- 68 Placenta.ab,kw,ti. (1980)
- 69 Placentas.ab,kw,ti. (147)
- 70 Placentome.ab,kw,ti. (1)
- 71 Placentoma.ab,kw,ti. (0)
- 72 57 or 58 or 59 or 60 or 61 or 62 or 63 or 64 or 65 or 66 or 67 or 68 or 69 or  
70 or 71 (45657)
- 73 56 or 72 (92693)
- 74 Warfarin.ab,kw,ti. (4486)
- 75 "4-Hydroxy-3-(3-oxo-1-phenylbutyl)-2H-1-benzopyran-2-one".ab,kw,ti. (43)
- 76 Apo-Warfarin.ab,kw,ti. (1)
- 77 Aldocumar.ab,kw,ti. (1)
- 78 Gen-Warfarin.ab,kw,ti. (1)
- 79 Warfant.ab,kw,ti. (0)
- 80 Coumadin.ab,kw,ti. (170)
- 81 Marevan.ab,kw,ti. (9)
- 82 Warfarin Potassium.ab,kw,ti. (2)
- 83 Potassium, Warfarin.ab,kw,ti. (1)
- 84 Warfarin Sodium.ab,kw,ti. (153)
- 85 Sodium, Warfarin.ab,kw,ti. (11)
- 86 Coumadine.ab,kw,ti. (9)
- 87 Tedicumar.ab,kw,ti. (0)
- 88 acenocoumarol.ab,kw,ti. (206)
- 89 Nicoumalone.ab,kw,ti. (6)
- 90 Acenocoumarin.ab,kw,ti. (11)
- 91 phenprocoumon.ab,kw,ti. (196)
- 92 Phenprocoumalol.ab,kw,ti. (0)

- 93 74 or 75 or 76 or 77 or 78 or 79 or 80 or 81 or 82 or 83 or 84 or 85 or 86 or  
87 or 88 or 89 or 90 or 91 or 92 (4869)
- 94 heparin.ab,kw,ti. (10294)
- 95 heparins.ab,kw,ti. (653)
- 96 Unfractionated Heparin.ab,kw,ti. (1803)
- 97 UFH.ab,kw,ti. (744)
- 98 Heparin, Unfractionated.ab,kw,ti. (112)
- 99 Heparinic Acid.ab,kw,ti. (0)
- 100 Liquaemin.ab,kw,ti. (0)
- 101 Sodium Heparin.ab,kw,ti. (95)
- 102 Heparin, Sodium.ab,kw,ti. (150)
- 103 Heparin Sodium.ab,kw,ti. (150)
- 104 alpha-Heparin.ab,kw,ti. (4)
- 105 alpha Heparin.ab,kw,ti. (4)
- 106 enoxaparin.ab,kw,ti. (1924)
- 107 nadroparin.ab,kw,ti. (244)
- 108 fraxiparin.ab,kw,ti. (32)
- 109 low molecular weight heparin.ab,kw,ti. (3054)
- 110 LMWH.ab,kw,ti. (1427)
- 111 Heparin, Low Molecular Weight.ab,kw,ti. (409)
- 112 Low Molecular Weight Heparin.ab,kw,ti. (3054)
- 113 Low-Molecular-Weight Heparin.ab,kw,ti. (3054)
- 114 danaparoid.ab,kw,ti. (50)
- 115 danaproid.ab,kw,ti. (1)
- 116 danaparoid sodium.ab,kw,ti. (17)
- 117 danaproid sodium.ab,kw,ti. (1)
- 118 Aspirin.ab,kw,ti. (12027)
- 119 Acetylsalicylic Acid.ab,kw,ti. (3218)
- 120 Acid, Acetylsalicylic.ab,kw,ti. (54)
- 121 "2-(Acetyloxy)benzoic Acid".ab,kw,ti. (2)
- 122 Acylpyrin.ab,kw,ti. (129)
- 123 ASA.ab,kw,ti. (17266)
- 124 new oral anticoagulants.ab,kw,ti. (142)



- 125 NOACs.ab,kw,ti. (254)
- 126 Direct oral anticoagulants.ab,kw,ti. (236)
- 127 DOACs.ab,kw,ti. (179)
- 128 dabigatran.ab,kw,ti. (950)
- 129 rivaroxaban.ab,kw,ti. (1289)
- 130 apixaban.ab,kw,ti. (769)
- 131 edoxaban.ab,kw,ti. (459)
- 132 xarelto.ab,kw,ti. (57)
- 133 ximelagatran.ab,kw,ti. (207)
- 134 124 or 125 or 126 or 127 or 128 or 129 or 130 or 131 or 132 or 133 (3141)
- 135 118 or 119 or 120 or 121 or 122 or 123 (29601)
- 136 94 or 95 or 96 or 97 or 98 or 99 or 100 or 101 or 102 or 103 or 104 or 105  
or 106 or 107 or 108 or 109 or 110 or 111 or 112 or 113 or 114 or 115 or 116 or 117  
(11674)
- 137 Fondaparinux.ab,kw,ti. (405)
- 138 Fondaparinux Sodium.ab,kw,ti. (42)
- 139 137 or 138 (405)
- 140 Argatroban.ab,kw,ti. (151)
- 141 hirudin.ab,kw,ti. (195)
- 142 Hirudins.ab,kw,ti. (15)
- 143 bivalirudin.ab,kw,ti. (530)
- 144 lepirudin.ab,kw,ti. (28)
- 145 140 or 141 or 142 or 143 or 144 (877)
- 146 93 or 134 or 135 or 136 or 139 or 145 (44462)
- 147 35 and 73 and 146 (676)

**SinoMed**<to April,2019>

(妊娠[全字段] or 怀孕[全字段] or 孕期[全字段] or 孕妇[全字段]) and (抗凝[全  
字段] or 凝血[全字段] or 华法林[全字段] or 肝素 or[全字段] AND 抗凝药[全字  
段]) and (心脏瓣膜手术[全字段] or 心脏瓣膜[全字段] or 机械心脏瓣膜[全字段]  
or 人工心脏瓣膜[全字段] or 瓣膜[全字段] or 置换[全字段])

**Clinical trial registry** (www.ClinicalTrials.gov) < to April 3 ,2019>

(Pregnancy OR Pregnant OR Pregnancies OR Fetation OR Conception OR Newborn  
OR Infant OR Newborns OR Newborn OR Gestation OR Gravidity) AND (Heart  
Valve OR Heart Valves OR Cardiac Valves OR Valve OR Cardiac Valve OR  
Replacement OR Artificial)