

Guideline topic: Cardiac arrhythmias in coronary heart disease

General comments

Search coverage

Systematic Review (run on May 2004)

Databases covered: **Medline, Embase, CINAHL, PsycInfo** Dates covered:1999-2004

Cochrane

Total hits:1202

Pre-sifted result:133

Extra systematic searches were run for:

SG1: 1994-99 (main arrhythmias stem)

SG2: 1985-99 (main arrhythmias stem; and

KQ 20 stem)

Guidelines (run on)

The guideline search used the patient stem.

Agency for Health Care Research and Quality (AHRQ) Databases covered:

ASERNIP-S

Canadian Medical Association

Centre for Clinical Effectiveness

(Australia)Health Technology Assessment

NHS Centre for Reviews and Dissemination

NHS Quality Improvement Scotland

National Institute for Clinical Excellence (NICE)

National Electronic Library for Health

National Guideline Clearinghouse

National Health and Medical Research Council (NHMRC)

New Zealand Guidelines Group

Swedish Council on Technology Assessment in Health Care (SBU)

TRIP Database

US National Institutes of Health

Total hits: 13

Guidelines evaluated using AGREE instrument:

Patient Search

Databases covered:

Dates covered:

Total hits:

Pre-sifted result:

Sifted result:

RCTs

Databases covered:

MEDLINE, EMBASE, CINAHL, PsycInfo, Cochrane

Dates covered:

SG1: 1999-2004; 1994-98
SG2: KQ7,11,19: 1997-2004
 KQ7 (extra): 2000-2004
 KQ8: 1999-2005 (conducted after other rct searches)
 KQ12: 1999-2004
 KQ18: 1997-2004
 KQ20: 1999-2004
SG3: KQ21A: 2001-2004
 KQ21B: 2001-2004
 KQ22: 2000-2004
 KQ23,24,25: 1999-2004

KQ25: 1990-98
SG4: KQ 30,31,32: 1999-2004
 KQ 33: 1999-2004

Total hits:

SG1 99-04: 2310
SG2: 4187
SG3: 4612
SG4:

Pre-sifted result:

SG1 99-04: 293
SG2: 576
SG3: 449
SG4:

Sifted result (TOTAL):

SG1 94-04: 19
SG2: 103
SG3: 64
SG4: 119

An extra RCT search was conducted for SG1 – looking back a further 5 years.

SG1 94-98: 1292

SG1 94-98: 195

An extra search was conducted for KQ18 and 20, for 1985-99

SG2 85-99: 434

SG2 85-99: 84

An extra search was conducted for KQ24. for 1990-98

SG3 KQ25:

SG3 KQ25 90-98: 269

Observational studies

Databases covered: MEDLINE, EMBASE and CINAHL

Dates covered:

SG1: 2000-2005
 SG2: KQ8, 12, 18, 19 & 20: 2000-05
 KQ 18 & 20: 1985-99

KQ7 OBS: 2000-05

SG3:
 SG4: 2000-05

<i>Total hits:</i>	<i>Pre-sifted result:</i>	<i>Sifted result (TOTAL):</i>
SG1: 1106 (NB a few obs papers were picked up from the RCT search for 94-98)	SG1: 237	SG1: 51
SG2:	SG2:	
KQ8, 12, 18 & 20: 2000-05: 1506	KQ8, 12, 18 & 20: 2000-05: 250	SG2: 76
KQ 18 & 20: 1985-9: 747	KQ 18 & 20: 1985-99: 120	
KQ7: 2000-05: 2520	KQ7: 2000-05: 420	
SG4:	SG4: 216	SG4: 34

Diagnostic studies

Databases covered:

Dates covered:

Total hits:

Pre-sifted result:

Sifted result:

Economic studies: Two separate searches were run, in an attempt to ensure that all papers were identified. The first consisted of terms generally related to AEDs and Public Access Defibrillation. The Second combined terms like 'public' and 'community' with the generic arrhythmias stem.

Databases covered: NEED

Dates covered: 1999-2004

(Search done October 2004)

Total hits:

Pre-sifted result:

Sifted result:

Search 1: 381

From both searches: 13

Search 2: 49

Supplementary searches

Databases covered:

Dates covered:

Total hits:

Pre-sifted result:

Sifted result:

Search strategies

The following are listings of the main Medline strategies used for this guideline. All conventions and symbols are from the Ovid implementation of Medline. Strategies used in other databases were substantially the same, though different terminology may have been used to take account of different thesaurii used in non-Medline databases. Search filters were added to identify studies of a particular type (guideline, systematic review, etc.) Listings of the search filters used by SIGN can be found on the SIGN Web site.

generic stem:

The searches listed are from MEDLINE – and were adapted for the EMBASE, CINAHL, PsycInfo and Cochrane databases.

exp ARRHYTHMIA/
exp Anti-Arrhythmia Agents/
DEFIBRILLATORS, IMPLANTABLE/
arrhythmi\$.tw.
(antiarrhythmi\$ or anti-arrhythmi\$).tw.
tachycardi\$.tw.
bradycardi\$.tw.
defibrill\$.tw.
fibrillat\$.tw.
or/1-9

Economic Search 1:

1. aed*
2. (automated next external next defibrillator*)
3. (out-of-hospital next cardiac next arrest)
4. (public next access next defibrillation)
5. (automatic next external next defibrillator*)
6. ELECTRIC COUNTERSHOCK
7. pad
8. defibrillator*
9. CARDIOPULMONARY RESUSCITATION
10. ((cardiac next arrest) near public)
11. ((cardiac next arrest) near community)
12. ((cardiac next arrest) near ems)
13. ((cardiac next arrest) near (emergency next medical next service*))
14. (arrhythmia* near (emergency next medical next service*))
15. (arrhythmia* near ems)
16. (arrhythmia* near public)
17. (arrhythmia* near community)
18. (defibrill* near community)
19. (defibrill* near out-of-hospital)
20. (defibrill* near public)
21. (defibrill* near ems)
22. (defibrill* near (emergency next medical next service*))
23. (fibrillat* near out-of-hospital)
24. (fibrillat* near public)
25. (fibrillat* near community)
26. (fibrillat* near ems)
27. (fibrillat* near (emergency next medical next service))
28. (tachycardia near out-of-hospital)
29. (tachycardia near public)
30. (tachycardia near community)
31. (tachycardia near ems)
32. (tachycardia near (emergency next medical next service*))
33. (bradycardia near (emergency next medical next service*))
34. (bradycardia near ems)

35. (bradycardia near community)
36. (bradycardia near public)
37. (bradycardia near out-of-hospital)
38. EMERGENCY MEDICAL SERVICES
39. (#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 or #35 or #36 or #37 or #38)

Economic Search 2:

1. ARRHYTHMIA
2. ANTI-ARRHYTHMIA AGENTS
3. DEFIBRILLATORS IMPLANTABLE
4. arrhythmi*
5. (antiarrhythmi* or anti-arrhythmi*)
6. tachycardi*
7. bradycardi*
8. defibrill*
9. fibrillat*
10. (#1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9)
11. (out-of-hospital or community or public)
12. EMERGENCY MEDICAL SERVICES
13. ((emergency next medical next service*) or ems)
14. CARDIOPULMONARY RESUSCITATION
15. ELECTRIC COUNTERSHOCK
16. (emergency next treatment)
17. (#11 or #12 or #13 or #14 or #15 or #16)
18. (#10 and #17)

Search SG1

- 24 acute coronary syndrome\$.tw. (3510)
- 25 ACS.tw. (1664)
- 26 exp Myocardial Infarction/ (28235)
- 27 myocardial infarct\$.tw. (29977)
- 28 exp Angina, Unstable/ (3492)
- 29 unstable angina.tw. (3792)
- 30 (unstable adj2 coronary).tw. (572)
- 31 non-ST-segment elevation.tw. (284)
- 32 ST-segment elevation.tw. (1617)
- 33 (STEMI or non-STEMI or NSTEMI or nonSTEMI).tw. (142)
- 34 heart attack.tw. (767)
- 35 (heart adj2 infarct\$).tw. (1048)
- 36 ST-elevation.tw. (1015)
- 37 exp Coronary Thrombosis/ (1643)
- 38 (coronary adj2 thrombos\$).tw. (617)
- 39 or/24-38 (45385)
- 40 exp Electric Countershock/ (3090)
- 41 electric\$ countershock.tw. (5)
- 42 (cardioversion or defibrillat\$).tw. (5636)
- 43 ((restore or maintain\$) adj3 sinus rhythm).tw. (359)

44 exp Anti-Arrhythmia Agents/ (35295)

45 (anti arrhythmia\$ or antiarrhythmia\$.tw. (4076)

46 exp Adrenergic beta-Antagonists/ (12062)

47 (acetbutolol or acecainide or acetyldigitoxin\$ or acetyldigoxin\$ or adenosine or ajmaline or alprenolol or amiodarone or aprindine or atenolol or atropine or bepridil or bretylium or bunaftine or bupranolol or cardiac glycoside\$ or digitoxin or digoxin or dihydroalprenolol or disopyramide or encainide or enkephalin or felodipine or fendiline or flecainide).tw. (31780)

48 (glyburide or lidocaine or losartan or magnesium or medigoxin or metipranolol or metoprolol or mexiletine or moricizine or nadolol or nicorandil or oxprenolol or practolol or prajmaline or procainamide or propafenone or propranolol or quinidine or sotalol or sparteine or timolol or tacainide or verapamil or abanoquil or actisomide or ajmalicine or alinidine or allapinin or almokalant or ambasilide or amezinium or arotinolol or asocainol or azimilide or barucainide or bevantolol or bidisomide or bipranol or bisaramil or bisoprolol or bunitrolol or butobendine or epinine or esmolol or etacizine or forskolin or glemanserin or ibopamine or ibutilide or indecainide or larcainide or melperone or meobentine or metipranolol or moracizine or moxaprine or nibentan or nicainoprol or nifekalant or nifenalol or norencainide or palatrigine or penticainide or phenytoin or pilsicainide or pirmenol or prajmaline or prajmalium or pranolium or pyrrocaine or quinacainol or recainam or risotilide or sematilide or solpecainol or stobadine or suricainide or tecadenoson or tedisamil or terikalant or tertatolol or tiapamil or tiracizine or tocainamide or tocainide or toliprolol or transcainide or xyloproct).tw. (35855)

49 (diltiazem or esmolol or azimilide or dofetilide or ibutilide).tw. (2567)

50 exp Anticoagulants/ (34122)

51 (anticoagulat\$ or anti-coagulat\$.tw. (6837)

52 exp calcium channel blockers/ or exp potassium channel blockers/ or exp sodium channel blockers/ (22512)

53 (anisindione or antivitamin K or apolate sodium or beciparil or chlorophacinone or cyclic inositol phosphate phosphodiesterase or defibrotide or dextran sulfate or diphenadione or fluindione or ghilanten or glycosaminoglycan polysulfate or mopidamol or naroparil or phenindione or tretoquinol or amlodipine or amrinone or bencyclane or cinnarizine or conotoxin\$ or flunarizine or gallopamil or isradipine or lidoflazine or mibefradil or nicardipine or nifedipine or nimodipine or nisoldipine or nitrendipine or perhexiline or prenylamine).tw. (10249)

54 or/40-53 (136363)

55 ((prophyla\$ or protect\$ or prevent\$) adj5 (arrhythm\$ or fibrillat)).tw. (749)

56 exp Cardiac Pacing, Artificial/ (4113)

57 exp Pacemaker, Artificial/ (3645)

58 pacemaker\$.tw. (5947)

59 ((cardiac or heart or temporary or external or permanent) adj3 pac\$.tw. (3231)

60 or/55-59 (11283)

61 exp Thrombolytic Therapy/ (6590)

62 (thrombol\$ or fibrinol\$.tw. (12881)

63 exp Streptokinase/ (1149)

64 exp Tissue Plasminogen Activator/ (4528)

65 exp ANISTREPLASE/ (38)

66 (tenecteplase or actepase or reteplase or streptokinase or anistreplase or tissue plasminogen activator or TPA).tw. (7557)

67 exp Aspirin/ (7538)

68 (aspirin or acetylsalicylic acid).tw. (9546)

69 exp Anti-Arrhythmia Agents/ (35295)

70 (anti arrhythmia\$ or antiarrhythmia\$.tw. (4076)

71 exp Adrenergic beta-Antagonists/ (12062)

72 (acetbutolol or acecainide or acetyldigitoxin\$ or acetyldigoxin\$ or adenosine or ajmaline or alprenolol or amiodarone or aprindine or atenolol or atropine or bepridil or bretylium or bunaftine or bupranolol or cardiac glycoside\$ or digitoxin or digoxin or dihydroalprenolol or disopyramide or encainide or enkephalin or felodipine or fendiline or flecainide).tw. (31780)

73 (glyburide or lidocaine or losartan or magnesium or medigoxin or metipranolol or metoprolol or mexiletine

or moricizine or nadolol or nicorandil or oxprenolol or practolol or prajmaline or procainamide or propafenone or propranolol or quinidine or sotalol or sparteine or timolol or tacainide or verapamil or abanoquil or actisomide or ajmalicine or alinidine or allapinin or almokalant or ambasilide or amezinium or arotinolol or asocainol or azimilide or barucainide or bevantolol or bidisomide or bipranol or bisaramil or bisoprolol or bunitrolol or butobendine or epinine or esmolol or etacizine or forskolin or glemanserin or ibopamine or ibutilide or indecainide or larcaidine or melperone or meobentine or metipranolol or moracizine or moxaprine or nibentan or nicainoprol or nifekalant or nifenalol or norencainide or palatrigine or penticainide or phenytoin or pilsicainide or pirmenol or prajmaline or prajmalium or pranolium or pyrrocaine or quinacainol or recainam or risotilide or sematilide or solpecainol or stobadine or suricainide or tecadenoson or tedisamil or terikalant or tertatolol or tiapamil or tiracizine or tocainamide or tocainide or toliprolol or transcainide or xyloproct).tw. (35855)

74 (diltiazem or esmolol or azimilide or dofetilide or ibutilide).tw. (2567)

75 exp calcium channel blockers/ or exp potassium channel blockers/ or exp sodium channel blockers/ (22512)

76 (amlodipine or amrinone or bencyclane or cinnarizine or conotoxin\$ or flunarizine or gallopamil or isradipine or lidoflazine or mibefradil or nifedipine or nifedipine or nimodipine or nisoldipine or nitrendipine or perhexiline or prenylamine).tw. (9374)

77 or/61-76 (125863)

78 exp Heart Arrest/ (7311)

79 ((heart or cardiac) adj3 (death or arrest or sudden)).tw. (9688)

80 78 or 79 (13385)

81 77 and 80 (2170)

82 exp Risk Assessment/ (39341)

83 (risk adj5 (arrhythm\$ or fibrillat\$)).tw. (1889)

84 exp risk factors/ (152731)

85 heart rate.tw. (26789)

86 LV ejection fraction.tw. (704)

87 left ventricular ejection fraction.tw. (3675)

88 ((LV or "left ventricular") adj2 dysfunction).tw. (4075)

89 exp Ventricular Dysfunction, Left/ (6238)

90 ((HR or heart rate) adj3 (variab\$ or turbulence)).tw. (4009)

91 exp Heart Function Tests/ (83500)

92 exercise test.tw. (2435)

93 electrocardiograph\$.tw. (6442)

94 ((barium or cough) adj3 reflex).tw. (194)

95 ECG.tw. (9959)

96 echocardiograph\$.tw. (23133)

97 (ventricular adj3 (beat\$ or freq\$ or rate or variab\$)).tw. (3010)

98 exp Heart Failure, Congestive/ (19828)

99 heart failure.tw. (24087)

100 or/82-99 (309954)

101 54 or 55 or 60 or 81 or 100 (427499)

102 exp ARRHYTHMIA/ (28961)

103 exp Anti-Arrhythmia Agents/ (35295)

104 exp DEFIBRILLATORS, IMPLANTABLE/ (3154)

105 arrhythmi\$.tw. (13413)

106 (antiarrhythmi\$ or anti-arrhythmi\$).tw. (4076)

107 tachycardi\$.tw. (9733)

108 bradycardi\$.tw. (3959)

109 defibrill\$.tw. (4493)

110 fibrillat\$.tw. (12450)

111 or/102-110 (72299)

- 112 23 and 39 and 101 and 111 (1021)
- 113 23 and 39 and 81 (275)
- 114 112 or 113 (1141)
- 115 limit 114 to (human and yr = 1999 - 2004) (713)
- 116 from 115 keep 1-200 (200)

Search SG2 KQ7, 11,19 (and 8) (not combined with Arrhythmias Stem)

- 1 exp Heart Arrest/ (7441)
- 2 ((cardi\$ or heart) adj3 (death or arrest)).tw. (12248)
- 3 (sudden adj2 death).tw. (7409)
- 4 exp Death, Sudden, Cardiac/ (3487)
- 5 or/1-4 (19555)
- 6 exp Risk Factors/ (154529)
- 7 (risk adj3 (cardi\$ or high or modif\$ or factor\$ or reduc\$)).tw. (140217)
- 8 exp primary prevention/ (23818)
- 9 or/6-7 (231183)
- 10 exp Cardiopulmonary Resuscitation/ (3356)
- 11 (cardi\$ adj2 resus\$).tw. (2676)
- 12 CPR.tw. (1751)
- 13 or/10-12 (4924)
- ~~14 exp Tachycardia, Ventricular/ (4563)~~
- ~~15 exp Ventricular Fibrillation/ (2807)~~
- ~~16 (ventric\$ adj2 (tachy\$ or fibrillat\$)).tw. (6977)~~
- ~~17 or/14 16 (9468)~~
- ~~18 exp Electric Countershock/ (3145)~~
- ~~19 exp Cardiopulmonary Resuscitation/ (3356)~~
- ~~20 (cardi\$ adj2 resus\$).tw. (2676)~~
- ~~21 CPR.tw. (1751)~~
- ~~22 (defibrillat\$ or electric countershock).tw. (4575)~~
- ~~23 or/18 22 (10265)~~
- ~~24 17 and 23 (2898)~~
- 25 aed.tw. (1020)
- 26 automa\$ external defibrill\$.tw. (348)
- 27 ((out-of-hospital or out of hospital) adj3 ((cardi\$ or heart) adj arrest)).tw. (653)
- 28 public access defibrill\$.tw. (77)
- 29 PAD.tw. (3220)
- 30 exp Cardiopulmonary Resuscitation/ (3356)
- 31 (cardi\$ adj2 resus\$).tw. (2676)
- 32 CPR.tw. (1751)
- 33 exp Electric Countershock/ (3145)
- 34 (defibrillat\$ or electric countershock or cardioversion).tw. (5743)
- 35 ((cardi\$ or heart) adj3 (public or community or EMS or emergency medical service\$)).tw. (640)
- 36 (defibrillat\$ adj3 (public or community or EMS or emergency medical service\$)).tw. (129)
- 37 (fibrillat\$ adj3 (public or community or EMS or emergency medical service\$)).tw. (15)
- 38 (arrhythm\$ adj3 (public or community or EMS or emergency medical service\$)).tw. (9)
- 39 or/25-38 (15367)
- 40 9 or 13 or 39 (244664)
- 41 5 and 40 (8648)

SG2 KQ7 extra search (not combined with Arrhythmias main stem)

- 1 exp Hypertension/ (47652)
- 2 hypertension.tw. (56490)
- 3 exp Smoking Cessation/ (5727)
- 4 exp SMOKING/ exp Alcohol/(26558)
- 5 (smoking or alcohol).tw. (34434)
- 6 exp Hyperlipidemia/ (14400)
- 7 hyperlipid\$.tw. (5525)
- 8 exp Genetic Predisposition to Disease/ (19299)
- 9 ((genetic or famil\$) and (risk or predispos\$ or suscep\$ or factor or history)).tw. (84483)
- 10 exp Diabetes Mellitus/ (64609)
- 11 diabet\$.tw. (80500)
- 12 exp Hypertrophy, Left Ventricular/ (3989)
- 13 (hypertroph\$ adj5 ventric\$).tw. (5530)
- 14 exp Obesity/ (25119)
- 15 exp Diet/ (33042)
- 16 diet.tw. (44296)
- 17 exp Fatty Acids, Omega-3/ (4019)
- 18 (omega adj3 acid).tw. (641)
- 19 exp Physical Fitness/ or exp Exercise/ (21930)
- 20 (Activity or fitness or exercise).tw. (477694)
- 21 or/1-20 (783036)
- 22 limit 21 to (human and yr= 2000-2004) (305248)
- 23 exp Heart Arrest/ (7441)
- 24 ((cardi\$ or heart) adj3 (death or arrest)).tw. (12248)
- 25 (sudden adj2 death).tw. (7409)
- 26 exp Death, Sudden, Cardiac/ (3487)
- 27 or/23-26 (19555)
- 28 22 and 27 (2926)

Search SG2 KQ8 (not combined with Arrhythmias stem) – This was used for an observational search. For the RCT search, it was covered by the search for KQ 7,11 & 19.

1. exp Cardiopulmonary Resuscitation/
2. cpr.tw.
3. (cardio\$ adj3 resus\$).tw.
4. exp Resuscitation/
5. or/1-4
6. exp Heart Arrest/
7. exp Death, Sudden, Cardiac/
8. (sudden adj2 death).tw.
9. ((cardi\$ or heart) adj3 (attack or arrest or death)).tw.
10. or/6-9
11. 5 and 10
12. limit 11 to (humans and yr= 1999 - 2005)

Search SG2 KQ12 (not combined with Arrhythmias stem)

- 1 exp Heart Arrest/ (7441)
- 2 ((cardi\$ or heart) adj3 (death or arrest)).tw. (12248)
- 3 exp Death, Sudden, Cardiac/ (3487)
- 4 exp Myocardial Infarction/ (28573)
- 5 ((myocardial or heart) adj3 infarct\$).tw. (30894)

- 6 ("MI" or "AMI").tw. (10154)
- 7 exp Angina, Unstable/ (3540)
- 8 unstable angina.tw. (3832)
- 9 (unstable adj2 coron\$).tw. (580)
- 10 ST-segment elevation.tw. (1660)
- 11 (STEMI or non-STEMI or NSTEMI or nonSTEMI).tw. (158)
- 12 exp Coronary Thrombosis/ (1668)
- 13 (coron\$ adj2 thrombo\$).tw. (1101)
- 14 or/1-13 (58644)
- 15 exp Electric Countershock/ (3145)
- 16 autom\$ external defibrillat\$.tw. (348)
- 17 AED.tw. (1020)
- 18 (cardioversion or defibrillat\$).tw. (5743)
- 19 or/15-18 (7381)
- 20 14 and 19 (2148)

Search SG2 KQ18 (not combined with Arrhythmias Stem)

- 1 exp Tachycardia, Ventricular/ (4563)
- 2 exp Ventricular Fibrillation/ (2807)
- 3 (ventric\$ adj3 (arrhythm\$ or tachy\$ or fibrillat\$)).tw. (9696)
- 4 or/1-3 (11611)
- 5 exp Myocardial Revascularization/ (23687)
- 6 revasculari?ation.tw. (10310)
- 7 (angioplast\$ or atherectom\$).tw. (12586)
- 8 coron\$ artery bypass.tw. (9377)
- 9 coron\$ bypass.tw. (2181)
- 10 CABG.tw. (3948)
- 11 or/5-10 (36066)
- 12 4 and 11 (596)

Search SG2 KQ20 (not combined with Arrhythmias Stem)

- 1 cpr.tw. (1751)
- 2 (cardio\$ adj3 resus\$).tw. (2316)
- 3 exp Heart Arrest/ (7441)
- 4 exp Death, Sudden, Cardiac/ (3487)
- 5 (sudden adj2 death).tw. (7409)
- 6 ((cardi\$ or heart) adj3 (arrest or death)).tw. (12248)
- 7 exp Resuscitation/ (15736)
- 8 or/1-7 (33814)
- 9 exp Cardiopulmonary Resuscitation/ed [Education] (452)
- 10 ((educat\$ or train\$) and (cpr or resus\$)).tw. (914)
- 11 exp Education/ (129974)
- 12 exp First Aid/ (844)
- 13 ((train\$ or educat\$ or inform\$) and (relative or carer or friend or husband or wife or spouse or famil\$)).tw. (40239)
- 14 or/9-13 (165041)
- 15 8 and 14 (2072)

Search SG3 KQ21A (not combined with Arrhythmias Stem)

- 1 exp Myocardial Ischemia/ (75608)
- 2 ((ischaem\$ or ischem\$) adj3 (coron\$ or cardiac or heart or myocardial)).tw. (17910)
- 3 (coron\$ adj3 (disease\$ or aneurysm or arteriosclerosis or stenosis or restenosis or thrombo\$ or vasospasm)).tw. (32078)
- 4 angina.tw. (10619)
- 5 (myocardial adj3 infarct\$).tw. (30647)
- 6 or/1-5 (96615)
- 7 LV ejection fraction.tw. (715)
- 8 left ventricular ejection fraction.tw. (3727)
- 9 ((LV or "left ventricular") adj3 (dysfunction or function or impair\$)).tw. (10632)
- 10 exp Ventricular Dysfunction, Left/ (6340)
- 11 or/7-10 (16054)
- 12 exp Defibrillators, Implantable/ (3225)
- 13 ("implantable cardiac defibrillator" or ICD).tw. (4762)
- 14 (implant\$ adj3 defibrillat\$).tw. (2544)
- 15 exp Electric Countershock/ (3145)
- 16 (electric\$ adj3 countershock).tw. (7)
- 17 (cardioversion or defibrillat\$).tw. (5743)
- 18 ((restore or maintain\$) adj3 sinus).tw. (389)
- 19 exp Anti-Arrhythmia Agents/ (35587)
- 20 (anti arrhythmi\$ or antiarrhythmi\$).tw. (4111)
- 21 exp Adrenergic beta-Antagonists/ (12178)
- 22 (acetbutolol or acecainide or acetyldigitoxin\$ or acetyldigoxin\$ or adenosine or ajmaline or alprenolol or amiodarone or aprindine or atenolol or atropine or bepridil or bretylium or bunaftine or bupranolol or cardiac glycoside\$ or digitoxin or digoxin or dihydroalprenolol or disopyramide or encainide or enkephalin or felodipine or fendiline or flecainide).tw. (32089)
- 23 (glyburide or lidocaine or losartan or magnesium or medigoxin or metipranolol or metoprolol or mexiletine or moricizine or nadolol or nicorandil or oxprenolol or practolol or prajmaline or procainamide or propafenone or propranolol or quinidine or sotalol or sparteine or timolol or tacainide or verapamil or abanoquil or actisomide or ajmalicine or alinidine or allapinin or almokalant or ambasilide or amezinium or arotinolol or asocainol or azimilide or barucainide or bevantolol or bidisomide or bipranol or bisaramil or bisoprolol or bunitrolol or butobendine or epinine or esmolol or etacizine or forskolin or glemanserin or ibopamine or ibutilide or indecainide or larcaïnide or melperone or meobentine or metipranolol or moracizine or moxaprine or nibentan or nicainoprol or nifekalant or nifenalol or norencainide or palatrigine or penticainide or phenytoin or pilsicainide or pirmenol or prajmaline or prajmalium or pranolium or pyrrocaine or quinacainol or recainam or risotilide or sematilide or solpecainol or stobadine or surcainide or tecadenoson or tedisamil or terikalant or tertatolol or tiapamil or tiracizine or tocainamide or tocainide or toliprolol or transcainide or xyloproct).tw. (36152)
- 24 (diltiazem or esmolol or azimilide or dofetilide or ibutilide).tw. (2589)
- 25 exp calcium channel blockers/ or exp potassium channel blockers/ or exp sodium channel blockers/ (22678)
- 26 (anisindione or antivitamin K or apolate sodium or beciparil or chlorophacinone or cyclic inositol phosphate phosphodiesterase or defibrotide or dextran sulfate or diphenadione or fluindione or ghilanten or glycosaminoglycan polysulfate or mopidamol or naroparil or phenindione or tretoquinol or amlodipine or amrinone or bencyclane or cinnarizine or conotoxin\$ or flunarizine or gallopamil or isradipine or lidoflazine or mibefradil or nicardipine or nifedipine or nimodipine or nisoldipine or nitrendipine or perhexiline or prenylamine).tw. (10327)
- 27 or/12-26 (106483)
- 28 6 and 11 and 27 (1122)

Search SG3 KQ21B (combined with Arrhythmias stem)

- 1 exp ARRHYTHMIA/ (29408)
- 2 exp Anti-Arrhythmia Agents/ (35587)

3 exp DEFIBRILLATORS, IMPLANTABLE/ (3225)

4 (arrhythmi\$ or fibrill\$.tw. (30310)

5 (antiarrhythmi\$ or anti-arrhythmi\$.tw. (4111)

6 tachycardi\$.tw. (9861)

7 bradycardi\$.tw. (4013)

8 defibrill\$.tw. (4579)

9 (fibrillat\$ or (conduction adj3 defect\$)).tw. (12977)

10 (ventricular\$ adj3 premature).tw. (884)

11 or/1-10 (80411)

12 exp Myocardial Ischemia/ (75608)

13 ((ischaem\$ or ischem\$) adj3 (coron\$ or cardiac or heart or myocardial)).tw. (17910)

14 (coron\$ adj3 (disease\$ or aneurysm or arteriosclerosis or stenosis or restenosis or thrombo\$ or vasospasm)).tw. (32078)

15 angina.tw. (10619)

16 (myocardial adj3 infarct\$.tw. (30647)

17 or/12-16 (96615)

18 exp Defibrillators, Implantable/ (3225)

19 ICD.tw. (4744)

20 (implant\$ adj3 defibrillat\$.tw. (2544)

21 exp Electric Countershock/ (3145)

22 (electric\$ adj3 countershock).tw. (7)

23 (cardioversion or defibrillat\$.tw. (5743)

24 ((restor\$ or maintain\$) adj3 sinus).tw. (804)

25 exp Anti-Arrhythmia Agents/ (35587)

26 (anti arrhythmi\$ or antiarrhythmi\$.tw. (4111)

27 exp Adrenergic beta-Antagonists/ (12178)

28 (acetbutolol or acecainide or acetyldigitoxin\$ or acetyldigoxin\$ or adenosine or ajmaline or alprenolol or amiodarone or aprindine or atenolol or atropine or bepridil or bretylium or bunaftine or bupranolol or cardiac glycoside\$ or digitoxin or digoxin or dihydroalprenolol or disopyramide or encainide or enkephalin or felodipine or fendiline or flecainide).tw. (32089)

29 (glyburide or lidocaine or losartan or magnesium or medigoxin or metipranolol or metoprolol or mexiletine or moricizine or nadolol or nicorandil or oxprenolol or practolol or prajmaline or procainamide or propafenone or propranolol or quinidine or sotalol or sparteine or timolol or tacainide or verapamil or abanoquil or actisomide or ajmalicine or alinidine or allapinin or almokalant or ambasilide or amezinium or arotinolol or asocainol or azimilide or barucainide or bevantolol or bidisomide or bipranol or bisaramil or bisoprolol or bunitrolol or butobendine or epinine or esmolol or etacizine or forskolin or glemanserin or ibopamine or ibutilide or indecainide or larcaïnide or melperone or meobentine or metipranolol or moracizine or moxaprine or nifedipine or nifekalant or nifenalol or norencainide or palatrigine or penticainide or phenytoin or pilsicainide or pirmenol or prajmaline or prajmalium or pranolium or pyrrocaine or quinacainol or recainam or risotilide or sematilide or solpecainol or stobadine or suricainide or tecadenoson or tedisamil or terikalant or tertatolol or tiapamil or tiracizine or tocainamide or tocainide or toliprolol or transcainide or xyloproct).tw. (36152)

30 (diltiazem or esmolol or azimilide or dofetilide or ibutilide).tw. (2589)

31 exp calcium channel blockers/ or exp potassium channel blockers/ or exp sodium channel blockers/ (22678)

32 (anisindione or antivitamin K or apolate sodium or beciparil or chlorophacinone or cyclic inositol phosphate phosphodiesterase or defibrotide or dextran sulfate or diphenadione or fluindione or ghlilanten or glycosaminoglycan polysulfate or mopidamol or naroparil or phenindione or tretoquinol or amlodipine or amrinone or bencyclane or cinnarizine or conotoxin\$ or flunarizine or gallopamil or isradipine or lidoflazine or mibefradil or nicardipine or nifedipine or nimodipine or nisoldipine or nitrendipine or perhexiline or prenylamine).tw. (10327)

33 or/18-32 (106600)

34 17 and 33 (9209)

35 11 and 34 (5207)

Search SG3 K22 (combined with Arrhythmias Stem)

- 1 exp Myocardial Infarction/ (28573)
- 2 MI.tw. (6824)
- 3 ((heart or myocardial) adj3 infarct\$.tw. (30894)
- 4 heart attack.tw. (775)
- 5 exp Heart Failure, Congestive/ (20097)
- 6 ((heart or cardiac) adj3 failure).tw. (27066)
- 7 LV ejection fraction.tw. (715)
- 8 left ventricular ejection fraction.tw. (3727)
- 9 ((LV or "left ventricular") adj3 (dysfunction\$ or function\$ or impair\$)).tw. (10904)
- 10 exp Ventricular Dysfunction, Left/ (6340)
- 11 or/1-10 (78238)
- 12 (cardioversion or defibrillat\$.tw. (5743)
- 13 ((restor\$ or maintain\$) adj3 sinus).tw. (804)
- 14 sinus rhythm.tw. (3437)
- 15 exp Anti-Arrhythmia Agents/ (35587)
- 16 (anti arrhythmi\$ or antiarrhythmi\$.tw. (4111)
- 17 exp Adrenergic beta-Antagonists/ (12178)
- 18 (acetbutolol or acecainide or acetyldigoxin\$ or acetyldigoxin\$ or adenosine or ajmaline or alprenolol or amiodarone or aprindine or atenolol or atropine or bepridil or bretylium or bunaftine or bupranolol or cardiac glycoside\$ or digitoxin or digoxin or dihydroalprenolol or disopyramide or encainide or enkephalin or felodipine or fendiline or flecainide).tw. (32089)
- 19 (glyburide or lidocaine or losartan or magnesium or medigoxin or metipranolol or metoprolol or mexiletine or moricizine or nadolol or nicorandil or oxprenolol or practolol or prajmaline or procainamide or propafenone or propranolol or quinidine or sotalol or sparteine or timolol or tacainide or verapamil or abanoquil or actisomide or ajmalicine or alinidine or allapinin or almokalant or ambasilide or amezinium or arotinolol or asocainol or azimilide or barucainide or bevantolol or bidisomide or bipranol or bisaramil or bisoprolol or bunitrolol or butobendine or epinine or esmolol or etacizine or forskolin or glemanserin or ibopamine or ibutilide or indecainide or larcaidine or melperone or meobentine or metipranolol or moracizine or moxaprine or nibentan or nicainoprol or nifekalant or nifenalol or norencainide or palatrigine or penticainide or phenytoin or pilsicainide or pirmenol or prajmaline or prajmalium or pranolium or pyrrocaine or quinacainol or recainam or risotilide or sematilide or solpecainol or stobadine or suricainide or tecadenoson or tedisamil or terikalant or tertatolol or tiapamil or tiracizine or tocainamide or tocainide or toliprolol or transcainide or xyloproct).tw. (36152)
- 20 (diltiazem or esmolol or azimilide or dofetilide or ibutilide).tw. (2589)
- 21 exp calcium channel blockers/ or exp potassium channel blockers/ or exp sodium channel blockers/ (22678)
- 22 (anisindione or antivitamin K or apolate sodium or beciparil or chlorophacinone or cyclic inositol phosphate phosphodiesterase or defibrotide or dextran sulfate or diphenadione or fluindione or ghilanten or glycosaminoglycan polysulfate or mopidamol or naroparil or phenindione or tretoquinol or amlodipine or amrinone or bencyclane or cinnarizine or conotoxin\$ or flunarizine or gallopamil or isradipine or lidoflazine or mibefradil or nicardipine or nifedipine or nimodipine or nisoldipine or nitrendipine or perhexiline or prenylamine).tw. (10327)
- 23 or/12-22 (103767)
- 24 11 and 23 (9864)

Search SG3 K23, 24, 25 (not combined with Arrhythmias Stem)

- 1 (cardioversion or defibrillat\$.tw. (5743)
- 2 ((restor\$ or maintain\$) adj3 sinus).tw. (804)
- 3 sinus rhythm.tw. (3437)
- 4 exp Anti-Arrhythmia Agents/ (35587)

- 5 (anti arrhythmi\$ or antiarrhythmi\$.tw. (4111)
- 6 exp Adrenergic beta-Antagonists/ (12178)
- 7 exp SOTALOL/ (502)
- 8 exp AMIODARONE/ (1581)
- 9 (acetbutolol or acecainide or acetyldigoxin\$ or acetyldigoxin\$ or adenosine or ajmaline or alprenolol or amiodarone or aprindine or atenolol or atropine or bepridil or bretylium or bunaftine or bupranolol or cardiac glycoside\$ or digoxin or digoxin or dihydroalprenolol or disopyramide or encainide or enkephalin or felodipine or fendiline or flecainide).tw. (32089)
- 10 (glyburide or lidocaine or losartan or magnesium or medigoxin or metipranolol or metoprolol or mexiletine or moricizine or nadolol or nicorandil or oxprenolol or practolol or prajmaline or procainamide or propafenone or propranolol or quinidine or sotalol or sparteine or timolol or tacainide or verapamil or abanoquil or actisomide or ajmalicine or alinidine or allapinin or almokalant or ambasilide or amezinium or arotinolol or asocainol or azimilide or barucaïnide or bevantolol or bidisomide or bipranol or bisaramil or bisoprolol or bunitrolol or butobendine or epinine or esmolol or etacizine or forskolin or glemanserin or ibopamine or ibutilide or indecainide or larcainide or melperone or meobentine or metipranolol or moracizine or moxaprine or nibentan or nicainoprol or nifekalant or nifenalol or norencainide or palatrigine or penticainide or phenytoin or pilsicainide or pirmenol or prajmaline or prajmalium or pranolium or pyrrocaine or quinacainol or recainam or risotilide or sematilide or solpecainol or stobadine or surcainide or tecadenoson or tedisamil or terikalant or tertatolol or tiapamil or tiracizine or tocainamide or tocainide or toliprolol or transcainide or xyloproct).tw. (36152)
- 11 (diltiazem or esmolol or azimilide or dofetilide or ibutilide).tw. (2589)
- 12 exp calcium channel blockers/ or exp potassium channel blockers/ or exp sodium channel blockers/ (22678)
- 13 (anisindione or antivitamin K or apolate sodium or beciparil or chlorophacinone or cyclic inositol phosphate phosphodiesterase or defibrotide or dextran sulfate or diphenadione or fluidione or ghilanten or glycosaminoglycan polysulfate or mopidamol or naroparil or phenindione or tretoquinol or amlodipine or amrinone or bencyclane or cinnarizine or conotoxin\$ or flunarizine or gallopamil or isradipine or lidoflazine or mibefradil or nicardipine or nifedipine or nimodipine or nisoldipine or nitrendipine or perhexiline or prenylamine).tw. (10327)
- 14 or/1-13 (103767)
- 15 exp Tachycardia, Ventricular/ (4563)
- 16 exp atrial fibrillation/ or exp ventricular fibrillation/ (10312)
- 17 tachycard\$.tw. (9861)
- 18 fibrillat\$.tw. (12695)
- 19 exp Defibrillators, Implantable/ (3225)
- 20 ICD.tw. (4744)
- 21 (implant\$ adj3 defibrillat\$.tw. (2544)
- 22 or/15-21 (28964)
- 23 14 and 22 (10948)

Search SG4 KQ30, 31, 32 (combined with Arrhythmias Stem)

- 1 exp ARRHYTHMIA/ (29408)
- 2 exp Anti-Arrhythmia Agents/ (35587)
- 3 exp DEFIBRILLATORS, IMPLANTABLE/ (3225)
- 4 (arrhythmi\$ or fibrill\$.tw. (30310)
- 5 (antiarrhythmi\$ or anti-arrhythmi\$.tw. (4111)
- 6 tachycardi\$.tw. (9861)
- 7 bradycardi\$.tw. (4013)
- 8 defibrill\$.tw. (4579)
- 9 (fibrillat\$ or (conduction adj3 defect\$)).tw. (12977)
- 10 (ventricular\$ adj3 premature).tw. (884)
- 11 or/1-10 (80411)
- 12 exp Coronary Artery Bypass/ (12862)

- 13 (coron\$ adj3 (bypass or graft\$ or surg\$)).tw. (12999)
- 14 (aortocoronar\$ adj3 (bypass or shunt\$ or anastomosis)).tw. (410)
- 15 (cardio\$ adj3 bypass).tw. (7788)
- 16 cabg.tw. (3948)
- 17 exp Cardiopulmonary Bypass/ (6284)
- 18 or/12-17 (23572)
- 19 11 and 18 (1975)

Search SG4 KQ33 (combined with Arrhythmias Stem)

- 1 exp ARRHYTHMIA/ (29408)
- 2 exp Anti-Arrhythmia Agents/ (35587)
- 3 exp DEFIBRILLATORS, IMPLANTABLE/ (3225)
- 4 (arrhythmi\$ or fibrill\$).tw. (30310)
- 5 (antiarrhythmi\$ or anti-arrhythmi\$).tw. (4111)
- 6 tachycardi\$.tw. (9861)
- 7 bradycardi\$.tw. (4013)
- 8 defibrill\$.tw. (4579)
- 9 (fibrillat\$ or (conduction adj3 defect\$)).tw. (12977)
- 10 (ventricular\$ adj3 premature).tw. (884)
- 11 or/1-10 (80411)
- 12 exp Patient Education/ (19473)
- 13 exp Preoperative Care/ (10783)
- 14 exp Anxiety/ (9655)
- 15 (patient and (recov\$ or inform\$ or care or educat\$ or anxiety)).tw. (88505)
- 16 exp professional-patient relations/ or exp nurse-patient relations/ or exp physician-patient relations/ (26729)
- 17 (leaflet\$ or booklet\$ or pamphlet\$ or tape\$ or video\$).tw. (30108)
- 18 exp Communication/ (76211)
- 19 exp pamphlets/ (758)
- 20 exp patient participation/ or exp counseling/ (11973)
- 21 (information adj3 (need\$ or resource\$)).tw. (6005)
- 22 patient literature.tw. (50)
- 23 exp Patient Care Team/ (14945)
- 24 exp Adaptation, Psychological/ (22337)
- 25 psycholog\$.tw. (33362)
- 26 exp social support/ (12540)
- 27 or/12-26 (300543)
- 28 11 and 27 (3760)

Search SG4 KQ33 2ND Try (not combined with Arrhythmias Stem)

The first search yielded few relevant results. A second strategy was tried – which combined three stems: on patient information (as before), CHD, and cardiac surgery. This was run in CINHALL, PsycInfo, MEDLINE and EMBASE.

NB – the search was limited to cardiac surgery – as general surgery would have been too broad.

- 1 exp Patient Education/ (19511)
- 2 exp Preoperative Care/ (10800)
- 3 exp Anxiety/ (9672)
- 4 (patient and (recov\$ or inform\$ or care or educat\$ or anxiety)).tw. (88725)
- 5 exp professional-patient relations/ or exp nurse-patient relations/ or exp physician-patient relations/ (26794)

6 (leaflet\$ or booklet\$ or pamphlet\$ or tape\$ or video\$.tw. (30166)
7 exp Communication/ (76399)
8 exp pamphlets/ (759)
9 exp patient participation/ or exp counseling/ (12000)
10 (information adj3 (need\$ or resource\$)).tw. (6032)
11 patient literature.tw. (50)
12 exp Patient Care Team/ (14978)
13 exp Adaptation, Psychological/ (22367)
14 psycholog\$.tw. (33427)
15 exp social support/ (12567)
16 or/1-15 (301205)
17 exp Cardiovascular Diseases/ (389906)
18 CHD.tw. (4147)
19 coronar\$ heart disease.tw. (10533)
20 heart failure.ti. (10599)
21 left ventricular failure.mp. (356)
22 left ventricular systolic dysfunction.mp. (507)
23 lvsd.mp. (47)
24 arrhythmi\$.tw. (13609)
25 (tachycardi\$ or bradycardi\$ or defibrillat\$ or fibrillat\$).tw. (26113)
26 angina.tw. (10630)
27 (myocardial adj (ischemia or ischaemia)).tw. (6116)
28 ((ischaemi\$ or ischemi\$) adj chest pain).tw. (82)
29 acute coronary syndrome\$.tw. (3605)
30 ACS.tw. (1702)
31 (unstable adj2 coron\$).tw. (581)
32 non-ST-segment elevation.tw. (299)
33 ST-segment elevation.tw. (1662)
34 (STEMI or non-STEMI or NSTEMI or nonSTEMI).tw. (159)
35 heart attack.tw. (779)
36 (heart adj2 infarct\$).tw. (1060)
37 ST-elevation.tw. (1043)
38 (coron\$ adj2 thrombos\$).tw. (627)
39 or/17-38 (401685)
40 revasculari?ation.tw. (10333)
41 ((cardi\$ or vascul\$ or heart\$ or myocard\$ or coron\$ or thorac\$) adj3 (surg\$ or bypass)).tw. (34479)
42 cabg.tw. (3955)
43 exp Cardiovascular Surgical Procedures/ (67404)
44 exp Thoracic Surgery/ (1031)
45 reperfusion.tw. (17615)
46 exp Angioplasty/ (15669)
47 (angioplast\$ or artherect\$).tw. (12225)
48 or/40-47 (101090)
49 39 and 48 (70410)
50 limit 49 to (human and yr= 1999-2005) (40458)
51 16 and 50 (3623)
52 from 51 keep 1 (1)

