Supplementary Online Content

Karmali KN, Lloyd-Jones DM, Berendsen MA, et al. Drugs for primary prevention of atherosclerotic cardiovascular disease: an overview of systematic reviews. *JAMA Cardiol*. Published online April 27, 2016. doi:10.1001/jamacardio.2016.0218.

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This supplementary material has been provided by the authors to give readers additional information about their work.

eAppendix 1. Search Documentation Details.

Database	Organizing body	Purpose	Pros	Cons
Cochrane Database of Systematic Reviews	Cochrane Library in the United Kingdom (UK)	Database of all available systematic reviews and protocols published by the Cochrane Collaboration	-Curated by the Cochrane Collaboration -Only systematic reviews and systematic review protocols	-Content is limited to reviews completed by the Cochrane Collaboration
Database of Abstracts of Reviews of Effects (DARE)	National Health Services (NHS) Centre for Reviews and Dissemination in York, UK	Collection of structured abstracts and bibliographic references of systematic reviews of effects of healthcare interventions	-Curated by Centre for Reviews and Dissemination -Only systematic reviews	-Only provides structured abstracts or bibliographic references -Under-representation of international systematic reviews
Health Technology Assessment (HTA)	NHS Centre for Reviews and Dissemination in York, UK	Collection of structured abstracts describing health technology assessment projects	-Curated by Centre for Reviews and Dissemination	-Content is limited to health technology assessments
Ovid MEDLINE	United States National Library of Medicine	Electronic database that indexes articles in select journals	-Broad selection of published articles -Free	-Majority of studies are non-systematic reviews -Requires structured search filters to identify systematic reviews -Does not include many European and non-English-language publications
EMBASE (Excerpta Medica Database)	Elsevier	Electronic database of medical and health research	-Includes all MEDLINE titles -Greater coverage of European and non-English-language publications -More comprehensive coverage of pharmaceuticals, psychiatry, toxicology, and alternative medicine compared with MEDLINE	-Requires subscription to Elsevier -Majority of studies are non-systematic reviews -Requires structured search filters to identify systematic reviews -search results can differ from MEDLINE due to different indexing protocols
PROSPERO	NHS Centre for Reviews and Dissemination in York, UK	International database of prospectively registered systematic reviews in health and social care	-Can identify systematic reviews in progress	-Few non-Cochrane systematic reviews are prospectively registered

We searched databases from 2005 to June 2015. We included broad searches of electronic databases (MEDLINE and EMBASE) in addition to databases that include only systematic reviews (Cochrane Database of Systematic Reviews, DARE, HTA). Since only a small percentage of titles in MEDLINE and EMBASE are systematic reviews, we employed structured search filters that have been validated in the literature to maximize precision for identifying systematic reviews. We used the "McMaster multi-term search filter" that has been developed specifically for MEDLINE to identify systematic reviews (Montori 2005). Since search syntax varies between MEDLINE and EMBASE, we used the "multi-term EMBASE filter" that has high specificity to translate search syntax used for MEDLINE to search syntax for EMBASE (Wong 2006). To identify unpublished, ongoing systematic reviews, we also searched PROSPERO to identify registered systematic reviews that had not been published or identified in our search.

References:

1. Cochrane Community (beta) Glossary. http://community.cochrane.org/glossary. [Accessed January 21, 2016]
2. Higgins JPT, Green S (editors). Cochrane Handbook for Systematic Reviews of Interventions Version 5.1.0 [updated March 2011]. The Cochrane Collaboration, 2011. Available from www.cochrane-handbook.org.
3. Montori VM, Wilczynski NL, Morgan D, Haynes RB; Hedges Team. Optimal search strategies for retrieving systematic reviews from Medline: analytical survey. BMJ. 2005 Jan 8;330(7482):68.
4. Suarez-Almazor, Maria E.; Belseck, Elaine; Homik, Joanne; Dorgan, Marlene; Ramos-Remus, Cesar. Controlled Clinical Trials. 2000 Vol 21 (5): 476-487.
5. Wong SS, Wilczynski NL, Haynes RB. Developing optimal search strategies for detecting clinically sound treatment studies in EMBASE. J Med Libr Assoc. 2006 Jan;94(1):41-7.

1. Aspirin

Database searched	Date searched	Results
Ovid MEDLINE(R) 1946 to June Week 1 2015	6/17/2015	258
EMBASE (embase.com)	6/17/2015	210
Cochrane Database of Systematic Reviews : Issue 6 of 12, June 2015 (Cochrane Library—Wiley)	6/17/2015	39
Database of Abstracts of Reviews of Effect : Issue 2 of 4, April 2015 (Cochrane Library—Wiley)	6/17/2015	43
Health Technology Assessment Database : Issue 2 of 4, April 2015 (Cochrane Library—Wiley)	6/17/2015	12
Total		**562**
After de-duplication		**483**

We also searched PROSPERO which retrieved 19 records.

See the details of each database search strategy below.

Ovid MEDLINE(R) 1946 to June Week 1 2015

1. exp Cardiovascular Diseases/
2. cardiovascular disease*.tw.
3. heart disease*.tw.
4. (coronary adj2 disease*).tw.
5. (arteriosclerosis or atherosclerosis).tw.
6. angina*.tw.
7. infarct*.tw.
8. exp Stroke/
9. (stroke or strokes).tw.
10. hypertens*.tw.
11. ((blood or diastolic or systolic) adj2 pressure*).tw.
12. exp Hyperlipidemias/
13. hyperlipid*.tw.
14. hypercholesterol*.tw.
15. cholesterol*.tw.
16. hypercholester?emia*.tw.
17. hyperlip?emia*.tw.
18. triglycerid*.tw.
19. hypertriglycerid?emia*.tw.
20. hyperlipoprotein?emia*.tw.
21. ldl.tw.
22. hdl.tw.
23. or/1-22
24. Aspirin/
25. (aspirin or dispril or polopiryna or zorprin or acetylsalicylic acid or polopirin or colfarit or aloxiprimum or micristin or easprin or magnecyl or solprin or ecotrin or "2-(acetyloxy)benzoic acid" or endosprin or acylpyrin or solupsan or acetysal).tw.
26. ((acetylsalicylic or (acetyl adj salicylic)) adj acid*).tw.
27. or/24-26
28. exp Primary Prevention/
29. (prevent* or prophyla*).tw.
30. 28 or 29
31. 23 and 27 and 30
32. (MEDLINE or systematic review).tw. or meta analysis.pt.
33. 31 and 32
34. limit 33 to yr="2005 -Current"

EMBASE (embase.com)

No. Query Results

#34 #33 AND [embase]/lim NOT [medline]/lim 210

#33 #32 AND (2005:py OR 2006:py OR 2007:py OR 2008:py OR 2009:py OR 2010:py OR 2011:py OR 2012:py OR 2013:py OR 2014:py OR 2015:py) 713

#32 #30 AND #31 949

#31 (meta NEXT/1 analysis):ab,ti OR (systematic NEXT/1 review):ab,ti OR medline:ab,ti 174993

#30 #23 AND #26 AND #29 23055

#29 #27 OR #28 1491776

#28 prevent*:ab,ti OR prophyla*:ab,ti 1482118

#27 'primary prevention'/exp 29782

#26 #24 OR #25 172444

#25 aspirin:ab,ti OR dispril:ab,ti OR polopiryna:ab,ti OR zorprin:ab,ti OR acetylsalicylic:ab,ti AND acid:ab,ti OR polopirin:ab,ti OR colfarit:ab,ti OR aloxiprimum:ab,ti OR micristin:ab,ti OR easprin:ab,ti OR magnecyl:ab,ti OR solprin:ab,ti OR ecotrin:ab,ti OR '2-(acetyloxy)benzoic acid':ab,ti OR endosprin:ab,ti OR acylpyrin:ab,ti OR solupsan:ab,ti OR acetysal:ab,ti 17541

#24 'acetylsalicylic acid'/de 170484

#23 #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 3866358

#22 hdl:ab,ti 72676

#21 ldl:ab,ti 81658

#20 hyperlipoprotein*emia*:ab,ti 5512

#19 hypertriglycerid*emia*:ab,ti 13464

#18 triglycerid*:ab,ti 116755

#17 hyperlip*emia*:ab,ti 39163

#16 hypercholester*emia*:ab,ti 34133

#15 cholesterol*:ab,ti 256170

#14 hypercholesterol*:ab,ti 38597

#13 hyperlipid*:ab,ti 35011

#12 'hyperlipidemia'/exp 123087

#11 ((blood OR diastolic OR systolic) NEAR/2 pressure*):ab,ti 366491

#10 hypertens*:ab,ti 494976

#9 stroke:ab,ti OR strokes:ab,ti 245313

#8 'cerebrovascular accident'/exp 227861

#7 infarct*:ab,ti 312247

#6 angina*:ab,ti 67931

#5 arteriosclerosis:ab,ti OR atherosclerosis:ab,ti 136361

#4 (coronary NEAR/2 disease*):ab,ti 161876

#3 (heart NEXT/1 disease*):ab,ti 183079

#2 (cardiovascular NEXT/1 disease*):ab,ti 151470

#1 'cardiovascular disease'/exp 3399341

Cochrane Library (CDSR, DARE, HTA)

Search Name: CMMI MITRE Overviews Aspirin Complete

ID	Search
#1	MeSH descriptor: [Cardiovascular Diseases] explode all trees
#2	(cardiovascular next/1 disease*):ab,ti
#3	(heart next/1 disease*):ab,ti
#4	(coronary near/2 disease*):ab,ti
#5	(arteriosclerosis or atherosclerosis):ab,ti
#6	angina*:ab,ti
#7	infarct*:ab,ti
#8	MeSH descriptor: [Stroke] explode all trees
#9	(stroke or strokes):ab,ti
#10	hypertens*:ab,ti
#11	((blood or diastolic or systolic) near/2 pressure*):ab,ti
#12	MeSH descriptor: [Hyperlipidemias] explode all trees
#13	hyperlipid*:ab,ti
#14	hypercholesterol*:ab,ti
#15	cholesterol*:ab,ti
#16	hypercholester*emia*
#17	hyperlip*emia*:ab,ti
#18	triglycerid*:ab,ti
#19	hypertriglycerid*emia*:ab,ti
#20	hyperlipoprotein*emia*:ab,ti
#21	ldl:ab,ti
#22	hdl:ab,ti
#23	{or #1-#22}
#24	MeSH descriptor: [Aspirin] this term only
#25	(aspirin or dispril or polopiryna or zorprin or acetylsalicylic acid or polopirin or colfarit or aloxiprimum or micristin or easprin or magnecyl or solprin or ecotrin or '2- (acetyloxy) benzoic acid' or endosprin or acylpyrin or solupsan or acetysal):ab,ti
#26	#24 or #25
#27	MeSH descriptor: [Primary Prevention] explode all trees
#28	prevent*:ab,ti or prophyla*:ab,ti
#29	#27 or #28
#30	#23 and #26 and #29 Publication Year from 2005 to 2015

Prospero search--Run 6/17/2015
http://www.crd.york.ac.uk/PROSPERO/

Search:

cardiovascular [all fields] AND
prevention [all fields] AND
aspirin [all fields]

19 records retrieved

CRD42015023444	Drugs for primary prevention of atherosclerotic cardiovascular diseases: an overview of reviews and systematic review of combinations	Ongoing
CRD42015022130	Aspirin and anti-inflammatory drugs for the prevention of dementia [Cochrane Protocol]	Ongoing
CRD42015019707	Aspirin prophylaxis for migraine with aura, a systematic review	Ongoing
CRD42015019657	Long-term dual antiplatelet therapy for secondary prevention of cardiovascular events in patients with previous acute coronary syndrome: a collaborative meta-analysis of randomised trials	Ongoing
CRD42015017491	The efficacy and safety of antiplatelet agents for patients with chronic kidney disease	Ongoing
CRD42015016222	A systematic review (and meta-analysis) to identify psychological determinants of medication adherence in stroke survivors: a review of observational studies: protocol for a systematic review and planned meta-analysis	Ongoing
CRD42014015602	Omega 3 fatty acids and cardiovascular disease: update	Ongoing
CRD42014013895	Patent foramen ovale closure after cryptogenic stroke: meta-analysis of individual patient data	Ongoing
CRD42014013806	Fatal bleeding, case-fatality rate of major bleeding and all-cause mortality in patient taking target specific oral anticoagulant, a meta-analysis of randomized controlled trials	Ongoing
CRD42014013730	The safety of new oral anticoagulants dabigatran, rivaroxaban, apixaban and edoxaban in conditions that elevate drug concentrations	Ongoing
CRD42014010596	The number of aspirin doses (e.g. once versus twice daily, alternate days) and the timing of aspirin intake (e.g. evening versus morning) in primary and secondary prevention of cardiovascular disease: a systematic review of the evidence	Ongoing
CRD42014010299	Comparative efficacy and safety of different antiplatelet drugs for prevention of major cardiovascular events and leg amputations in	Ongoing

	patients with peripheral arterial disease: network systematic review and multiple-treatments meta-analysis	
CRD42014008860	Aspirin and cardiovascular primary prevention in chronic kidney disease: a meta-analysis	Ongoing
CRD42014007013	Oral anticoagulants for stroke prevention	Ongoing
CRD42013004934	Ghrelin for chronic heart failure	Ongoing
CRD42012002999	Using systematic review and meta-analytical evidence from RCTs, what is the risk of adverse events from aspirin, taken for prophylactic use for the primary prevention of cardiovascular disease or cancer?	Ongoing
CRD42012002329	A systematic review of the effectiveness of preventive measures for coronary artery disease in Asian Indians	Ongoing
CRD42011001596	Novel platelet inhibitors for prevention of cerebro-vascular events: a systematic review and meta-analysis	Completed
CRD42011001157	Effect of non-steroidal anti-inflammatory drugs on C-reactive protein levels in patients with rheumatoid arthritis: a meta-analysis of randomized, double blind, placebo-controlled trials	

2. Blood pressure lowering drugs.

Database searched	**Date searched**	**Results**
Ovid MEDLINE(R) 1946 to June Week 2 2015	6/19/2015	335
EMBASE (embase.com)	6/19/2015	302
Cochrane Database of Systematic Reviews : Issue 6 of 12, June 2015 (Cochrane Library—Wiley)	6/19/2015	52
Database of Abstracts of Reviews of Effect : Issue 2 of 4, April 2015 (Cochrane Library—Wiley)	6/19/2015	49
Health Technology Assessment Database : Issue 2 of 4, April 2015 (Cochrane Library—Wiley)	6/19/2015	4
Total		**742**
After de-duplication		**645**

We also searched PROSPERO which retrieved 64 records.

See the details of each database search strategy below.

Ovid MEDLINE(R) 1946 to June Week 2 2015

1. exp Cardiovascular Diseases/
2. cardiovascular disease*.tw.
3. heart disease*.tw.
4. (coronary adj2 disease*).tw.
5. (arteriosclerosis or atherosclerosis).tw.
6. angina*.tw.
7. infarct*.tw.
8. exp Stroke/
9. (stroke or strokes).tw.
10. hypertens*.tw.
11. ((blood or diastolic or systolic) adj2 pressure*).tw.
12. exp Hyperlipidemias/
13. hyperlipid*.tw.
14. hypercholesterol*.tw.
15. cholesterol*.tw.
16. hypercholester?emia*.tw.
17. hyperlip?emia*.tw.
18. triglycerid*.tw.
19. hypertriglycerid?emia*.tw.
20. hyperlipoprotein?emia*.tw.
21. ldl.tw.
22. hdl.tw.
23. or/1-22
24. exp Angiotensin-Converting Enzyme Inhibitors/
25. ((angiotensin* or dipeptidyl* or kininase ii) adj3 (convert* or enzyme or inhibit* or recept* or block*)).tw.
26. (ace adj inhibit*).tw.
27. acei.tw.
28. (alacepril or altiopril or ancovenin or benazepril* or captopril or ceranapril or ceronapril or cilazapril or deacetylalacepril or delapril or derapril or enalapril* or epicaptopril or fasidotril* or fosinopril or foroxymithine or gemopatrilat or idrapril or ilepatril or imidapril* or indolapril or libenzapril or lisinopril or moexipril* or omapatrilat or pentopril* or perindopril* or pivopril or quinapril* or ramipril* or rentiapril or sampatrilat or saralasin or s nitrosocaptopril or spirapril* or temocapril* or teprotide or trandolapril* or utibapril* or zabicipril* or zofenopril* or Aceon or Accupril or Altace or Capoten or Lotensin or Mavik or Monopril or Prinivil or Univas or Vasotec or Zestril).tw.
29. or/24-28
30. exp Angiotensin Receptor Antagonists/
31. (angiotensin adj3 (receptor antagon* or receptor block*)).tw.
32. arb?.tw.
33. (abitesartan or azilsartan or candesartan or elisartan or embusartan or eprosartan or fimasartan or fonsartan or forasartan or irbesartan or KT3-671 or losartan or milfasartan or olmesartan or pomisartan or pratosartan or ripisartan or saprisartan or sparsentan or tasosartan or telmisartan or valsartan or zolasartan or Edarbi or Blopress or Atacand or Amias or Ratacand or Eprozar or Aprovel or Karvea or Avapro or Cozaar or Benicar or Olmecip or Micardis or Diovan).tw.
34. or/30-33
35. exp Calcium Channel Blockers/
36. (calcium adj2 (antagonist? or block* or inhibit*)).tw.
37. (amlodipine or aranidipine or azelnidipine or barnidipine or bencyclane or benidipine or bepridil or cilnidipine or cinnarizine or clentiazem or darodipine or diltiazem or efonidipine or elgodipine or etafenone or fantofarone or felodipine or fendiline or flunarizine or gallopamil or isradipine or lacidipine

or lercanidipine or lidoflazine or lomerizine or manidipine or mibefradil or nicardipine or nifedipine or niguldipine or nilvadipine or nimodipine or nisoldipine or nitrendipine or perhexiline or prenylamine or semotiadil or terodiline or tiapamil or verapamil or Adalat or Afeditab or Calan or Cardene or Cardizem or Cartia or Covera or Dilacor XR or Dilt-CD or Diltzac or DynaCirc or Isoptin or Nifedical or Nifeditab or Norvasc or Plendil or Procardia or Sular or Taztia or Tiamate or Tiazac or Verelan).tw.
38. or/35-37
39. exp Adrenergic alpha-Antagonists/
40. (adrenergic adj3 alpha adj3 (antagonist? or block* or receptor?)).tw.
41. (alfuzosin or bunazosin or doxazosin or prazosin or silodosin or tamsulosin or terazosin or trimazosin or Cardura or Hytrin or Minipress).tw.
42. or/39-41
43. exp Adrenergic beta-Antagonists/
44. (beta adj2 (antagonist? or block* or receptor?)).tw.
45. (acebutolol or adimolol or afurolol or alprenolol or amosulalol or arotinolol or atenolol or befunolol or betaxolol or bevantolol or bisoprolol or bopindolol or bornaprolol or brefonalol or bucindolol or bucumolol or bufetolol or bufuralol or bunitrolol or bunolol or bupranolol or butofilolol or butoxamine or carazolol or carteolol or carvedilol or celiprolol or cetamolol or chlortalidone cloranolol or cyanoiodopindolol or cyanopindolol or deacetylmetipranolol or diacetolol or dihydroalprenolol or dilevalol or epanolol or esmolol or exaprolol or falintolol or flestolol or flusoxolol or hydroxybenzylpinodolol or hydroxycarteolol or hydroxymetoprolol or indenolol or iodocyanopindolol or iodopindolol or iprocrolol or isoxaprolol or labetalol or landiolol or levobunolol or levomoprolol or medroxalol or mepindolol or methylthiopropranolol or metipranolol or metoprolol or moprolol or nadolol or oxprenolol or penbutolol or pindolol or nadolol or nebivolol or nifenalol or nipradilol or oxprenolol or pafenolol or pamatolol or penbutolol or pindolol or practolol or primidolol or prizidilol or procinolol or pronetalol or propranolol or proxodolol or ridazolol or salcardolol or soquinolol or sotalol or spirendolol or talinolol or tertatolol or tienoxolol or tilisolol or timolol or tolamolol or toliprolol or tribendilol or xibenolol or Betapace or Blocadren or Bystolic or Cartrol or Coreg or Corgard or Inderal or Kerlone or Levatol or Lopressor or Normodyne or Sectral or Tenormin or Toprol or Trandate or Visken or Zebeta).tw.
46. or/43-45
47. exp Sodium Potassium Chloride Symporter Inhibitors/
48. ((loop or ceiling) adj diuretic?).tw.
49. (bumetanide or ethacrynic acid or furosemide or mefruside or muzolimine or piretanide or torsemide or xipamide or Bumex or Edecrin or Lasix or Demadex).tw.
50. or/47-49
51. exp Thiazides/
52. exp Sodium Chloride Symporter Inhibitors/
53. (bendroflumethiazide or chlorothiazide or chlorthalidone or cyclopenthiazide or hydrochlorothiazide or hydroflumethiazide or indapamide or methyclothiazide or metolazone or polythiazide or quinethazone or trichlormethiazide or thiazide? or Aquatensen or Chlotride or Diucardin or Diulo or Diurese or Diuril or Enduron or Esidrix or Hydrodiuril or Hydromox or Hygroton or Lozol or Metahydrin or Microzide or Naqua or Naturetin or Oretic or Renese or Saluron or Thalitone or Zaroxolyn or Zide).tw.
54. or/51-53
55. exp Mineralocorticoid Receptor Antagonists/
56. ((mineralocorticoid or aldosterone) adj3 (antagonist? or block*)).tw.
57. (canrenoic acid or canrenone or eplerenone or finerenone or oxprenoate potassium or spironolactone or Aldactone or Contaren or Inspra or Luvion or Phanurane or Spiroletan).tw.
58. or/55-57
59. exp Antihypertensive Agents/
60. 29 or 34 or 38 or 42 or 46 or 50 or 54 or 58 or 59
61. exp Primary Prevention/
62. (prevent* or prophyla*).tw.

63. 61 or 62
64. 23 and 60 and 63
65. (MEDLINE or systematic review).tw. or meta analysis.pt.
66. 64 and 65
67. limit 66 to yr="2005 -Current"

EMBASE (embase.com)

No. Query Results

#67 #66 AND [embase]/lim NOT [medline]/lim 302

#66 #65 AND [2005-2015]/py 966

#65 #63 AND #64 1324

#64 (meta NEXT/1 analysis):ab,ti OR (systematic NEXT/1 review):ab,ti OR medline:ab,ti 175120

#63 #23 AND #59 AND #62 50934

#62 #60 OR #61 1492390

#61 prevent*:ab,ti OR prophyla*:ab,ti 1482728

#60 'primary prevention'/exp 29791

#59 #29 OR #34 OR #38 OR #42 OR #46 OR #50 OR #53 OR #57 OR #58 858298

#58 'antihypertensive agent'/exp 607349

#57 #54 OR #55 OR #56 34274

#56 'canrenoic acid':ab,ti OR canrenone:ab,ti OR eplerenone:ab,ti OR finerenone:ab,ti OR 'oxprenoate potassium':ab,ti OR spironolactone:ab,ti OR aldactone:ab,ti OR contaren:ab,ti OR inspra:ab,ti OR luvion:ab,ti OR phanurane:ab,ti OR spiroletan:ab,ti 8242

#55 ((mineralocorticoid OR aldosterone) NEAR/3 (antagonist* OR block*)):ab,ti 5045

#54 'mineralocorticoid antagonist'/exp 32578

#53 #51 OR #52 54646

#52 bendroflumethiazide:ab,ti OR chlorothiazide:ab,ti OR chlorthalidone:ab,ti OR cyclopenthiazide:ab,ti OR hydrochlorothiazide:ab,ti OR hydroflumethiazide:ab,ti OR indapamide:ab,ti OR methyclothiazide:ab,ti OR metolazone:ab,ti OR polythiazide:ab,ti OR quinethazone:ab,ti OR trichlormethiazide:ab,ti OR thiazide*:ab,ti OR aquatensen:ab,ti OR chlotride:ab,ti OR diucardin:ab,ti OR diulo:ab,ti OR diurese:ab,ti OR diuril:ab,ti OR enduron:ab,ti OR esidrix:ab,ti OR hydrodiuril:ab,ti OR hydromox:ab,ti OR hygroton:ab,ti OR lozol:ab,ti OR metahydrin:ab,ti OR microzide:ab,ti OR naqua:ab,ti OR naturetin:ab,ti OR oretic:ab,ti OR renese:ab,ti OR saluron:ab,ti OR thalitone:ab,ti OR zaroxolyn:ab,ti OR zide:ab,ti 18953

#51 'thiazide diuretic agent'/exp 51143

#50 #47 OR #48 OR #49 64424

#49 bumetanide:ab,ti OR ethacrynic:ab,ti AND acid:ab,ti OR furosemide:ab,ti OR mefruside:ab,ti OR muzolimine:ab,ti OR piretanide:ab,ti OR torsemide:ab,ti OR xipamide:ab,ti OR bumex:ab,ti OR edecrin:ab,ti OR lasix:ab,ti OR demadex:ab,ti 17529

#48 ((loop OR ceiling) NEAR/1 diuretic*):ab,ti 3325

#47 'loop diuretic agent'/exp 61833

#46 #43 OR #44 OR #45 266348

#45 acebutolol:ab,ti OR adimolol:ab,ti OR afurolol:ab,ti OR alprenolol:ab,ti OR amosulalol:ab,ti OR arotinolol:ab,ti OR atenolol:ab,ti OR befunolol:ab,ti OR betaxolol:ab,ti OR bevantolol:ab,ti OR bisoprolol:ab,ti OR bopindolol:ab,ti OR bornaprolol:ab,ti OR brefonalol:ab,ti OR bucindolol:ab,ti OR bucumolol:ab,ti OR bufetolol:ab,ti OR bufuralol:ab,ti OR bunitrolol:ab,ti OR bunolol:ab,ti OR bupranolol:ab,ti OR butofilolol:ab,ti OR butoxamine:ab,ti OR carazolol:ab,ti OR carteolol:ab,ti OR

carvedilol:ab,ti OR celiprolol:ab,ti OR cetamolol:ab,ti OR chlortalidone:ab,ti AND cloranolol:ab,ti OR cyanoiodopindolol:ab,ti OR cyanopindolol:ab,ti OR deacetylmetipranolol:ab,ti OR diacetolol:ab,ti OR dihydroalprenolol:ab,ti OR dilevalol:ab,ti OR epanolol:ab,ti OR esmolol:ab,ti OR exaprolol:ab,ti OR falintolol:ab,ti OR flestolol:ab,ti OR flusoxolol:ab,ti OR hydroxybenzylpinodolol:ab,ti OR hydroxycarteolol:ab,ti OR hydroxymetoprolol:ab,ti OR indenolol:ab,ti OR iodocyanopindolol:ab,ti OR iodopindolol:ab,ti OR iprocrolol:ab,ti OR isoxaprolol:ab,ti OR labetalol:ab,ti OR landiolol:ab,ti OR levobunolol:ab,ti OR levomoprolol:ab,ti OR medroxalol:ab,ti OR mepindolol:ab,ti OR methylthiopropranolol:ab,ti OR metipranolol:ab,ti OR metoprolol:ab,ti OR moprolol:ab,ti OR nadolol:ab,ti OR nebivolol:ab,ti OR nifenalol:ab,ti OR nipradilol:ab,ti OR oxprenolol:ab,ti OR pafenolol:ab,ti OR pamatolol:ab,ti OR penbutolol:ab,ti OR pindolol:ab,ti OR practolol:ab,ti OR primidolol:ab,ti OR prizidilol:ab,ti OR procinolol:ab,ti OR pronetalol:ab,ti OR propranolol:ab,ti OR proxodolol:ab,ti OR ridazolol:ab,ti OR salcardolol:ab,ti OR soquinolol:ab,ti OR sotalol:ab,ti OR spirendolol:ab,ti OR talinolol:ab,ti OR tertatolol:ab,ti OR tienoxolol:ab,ti OR tilisolol:ab,ti OR timolol:ab,ti OR tolamolol:ab,ti OR toliprolol:ab,ti OR tribendilol:ab,ti OR xibenolol:ab,ti OR betapace:ab,ti OR blocadren:ab,ti OR bystolic:ab,ti OR cartrol:ab,ti OR coreg:ab,ti OR corgard:ab,ti OR inderal:ab,ti OR kerlone:ab,ti OR levatol:ab,ti OR lopressor:ab,ti OR normodyne:ab,ti OR sectral:ab,ti OR tenormin:ab,ti OR toprol:ab,ti OR trandate:ab,ti OR visken:ab,ti OR zebeta:ab,ti 65016

#44 (beta NEAR/2 (antagonist* OR block* OR receptor*)):ab,ti 44893

#43 'beta adrenergic receptor blocking agent'/exp 250089

#42 #39 OR #40 OR #41 131997

#41 alfuzosin:ab,ti OR bunazosin:ab,ti OR doxazosin:ab,ti OR prazosin:ab,ti OR silodosin:ab,ti OR tamsulosin:ab,ti OR terazosin:ab,ti OR trimazosin:ab,ti OR cardura:ab,ti OR hytrin:ab,ti OR minipress:ab,ti 15787

#40 (adrenergic NEAR/3 alpha NEAR/3 (antagonist* OR block* OR receptor*)):ab,ti 5103

#39 'alpha adrenergic receptor blocking agent'/exp 129253

#38 #35 OR #36 OR #37 208645

#37 amlodipine:ab,ti OR aranidipine:ab,ti OR azelnidipine:ab,ti OR barnidipine:ab,ti OR bencyclane:ab,ti OR benidipine:ab,ti OR bepridil:ab,ti OR cilnidipine:ab,ti OR cinnarizine:ab,ti OR clentiazem:ab,ti OR darodipine:ab,ti OR diltiazem:ab,ti OR efonidipine:ab,ti OR elgodipine:ab,ti OR etafenone:ab,ti OR fantofarone:ab,ti OR felodipine:ab,ti OR fendiline:ab,ti OR flunarizine:ab,ti OR gallopamil:ab,ti OR isradipine:ab,ti OR lacidipine:ab,ti OR lercanidipine:ab,ti OR lidoflazine:ab,ti OR lomerizine:ab,ti OR manidipine:ab,ti OR mibefradil:ab,ti OR nicardipine:ab,ti OR nifedipine:ab,ti OR niguldipine:ab,ti OR nilvadipine:ab,ti OR nimodipine:ab,ti OR nisoldipine:ab,ti OR nitrendipine:ab,ti OR perhexiline:ab,ti OR prenylamine:ab,ti OR semotiadil:ab,ti OR terodiline:ab,ti OR tiapamil:ab,ti OR verapamil:ab,ti OR adalat:ab,ti OR afeditab:ab,ti OR calan:ab,ti OR cardene:ab,ti OR cardizem:ab,ti OR cartia:ab,ti OR covera:ab,ti OR dilacor:ab,ti OR 'dilt-cd':ab,ti OR diltzac:ab,ti OR dynacirc:ab,ti OR isoptin:ab,ti OR nifedical:ab,ti OR nifeditab:ab,ti OR norvasc:ab,ti OR plendil:ab,ti OR procardia:ab,ti OR sular:ab,ti OR taztia:ab,ti OR tiamate:ab,ti OR tiazac:ab,ti OR verelan:ab,ti 72724

#36 (calcium NEAR/2 (antagonist* OR block* OR inhibit*)):ab,ti 44737

#35 'calcium channel blocking agent'/exp 189632

#34 #30 OR #31 OR #32 OR #33 70560

#33 abitesartan:ab,ti OR azilsartan:ab,ti OR candesartan:ab,ti OR elisartan:ab,ti OR embusartan:ab,ti OR eprosartan:ab,ti OR fimasartan:ab,ti OR fonsartan:ab,ti OR forasartan:ab,ti OR irbesartan:ab,ti OR 'kt3-671':ab,ti OR losartan:ab,ti OR milfasartan:ab,ti OR olmesartan:ab,ti OR pomisartan:ab,ti OR pratosartan:ab,ti OR ripisartan:ab,ti OR saprisartan:ab,ti OR sparsentan:ab,ti OR tasosartan:ab,ti OR telmisartan:ab,ti OR valsartan:ab,ti OR zolasartan:ab,ti OR edarbi:ab,ti OR

blopress:ab,ti OR atacand:ab,ti OR amias:ab,ti OR ratacand:ab,ti OR eprozar:ab,ti OR aprovel:ab,ti OR karvea:ab,ti OR avapro:ab,ti OR cozaar:ab,ti OR benicar:ab,ti OR olmecip:ab,ti OR micardis:ab,ti OR diovan:ab,ti 20492

#32 arb:ab,ti OR arbs:ab,ti 8487

#31 (angiotensin NEAR/3 receptor NEXT/1 (antagon* OR block*)):ab,ti 14874

#30 'angiotensin receptor antagonist'/exp 65689

#29 #24 OR #25 OR #26 OR #27 OR #28 177385

#28 alacepril:ab,ti OR altiopril:ab,ti OR ancovenin:ab,ti OR benazepril*:ab,ti OR captopril:ab,ti OR ceranapril:ab,ti OR ceronapril:ab,ti OR cilazapril:ab,ti OR deacetylalacepril:ab,ti OR delapril:ab,ti OR derapril:ab,ti OR enalapril*:ab,ti OR epicaptopril:ab,ti OR fasidotril*:ab,ti OR fosinopril:ab,ti OR foroxymithine:ab,ti OR gemopatrilat:ab,ti OR idrapril:ab,ti OR ilepatril:ab,ti OR imidapril*:ab,ti OR indolapril:ab,ti OR libenzapril:ab,ti OR lisinopril:ab,ti OR moexipril*:ab,ti OR omapatrilat:ab,ti OR pentopril*:ab,ti OR perindopril*:ab,ti OR pivopril:ab,ti OR quinapril*:ab,ti OR ramipril*:ab,ti OR rentiapril:ab,ti OR sampatrilat:ab,ti OR saralasin:ab,ti OR 's nitrosocaptopril':ab,ti OR spirapril*:ab,ti OR temocapril*:ab,ti OR teprotide:ab,ti OR trandolapril*:ab,ti OR utibapril*:ab,ti OR zabicipril*:ab,ti OR zofenopril*:ab,ti OR aceon:ab,ti OR accupril:ab,ti OR altace:ab,ti OR capoten:ab,ti OR lotensin:ab,ti OR mavik:ab,ti OR monopril:ab,ti OR prinivil:ab,ti OR univas:ab,ti OR vasotec:ab,ti OR zestril:ab,ti 32754

#27 acei:ab,ti 4848

#26 (ace NEAR/1 inhibit*):ab,ti 24271

#25 ((angiotensin* OR dipeptidyl* OR 'kininase ii') NEAR/3 (convert* OR enzyme OR inhibit* OR recept* OR block*)):ab,ti 65272

#24 'dipeptidyl carboxypeptidase inhibitor'/exp 142551

#23 #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 3867712

#22 hdl:ab,ti 72676

#21 ldl:ab,ti 81658

#20 hyperlipoprotein*emia*:ab,ti 5512

#19 hypertriglycerid*emia*:ab,ti 13464

#18 triglycerid*:ab,ti 116755

#17 hyperlip*emia*:ab,ti 39179

#16 hypercholester*emia*:ab,ti 34133

#15 cholesterol*:ab,ti 256170

#14 hypercholesterol*:ab,ti 38597

#13 hyperlipid*:ab,ti 35011

#12 'hyperlipidemia'/exp 123087

#11 ((blood OR diastolic OR systolic) NEAR/2 pressure*):ab,ti 366491

#10 hypertens*:ab,ti 494976

#9 stroke:ab,ti OR strokes:ab,ti 245313

#8 'cerebrovascular accident'/exp 227861

#7 infarct*:ab,ti 312247

#6 angina*:ab,ti 67931

#5 arteriosclerosis:ab,ti OR atherosclerosis:ab,ti 136361

#4 (coronary NEAR/2 disease*):ab,ti 161876

#3 (heart NEXT/1 disease*):ab,ti 183079

#2 (cardiovascular NEXT/1 disease*):ab,ti 151470

#1 'cardiovascular disease'/exp 3399341

Cochrane Library (CDSR, DARE, HTA)

Search Name: CMMI MITRE Overviews Antihypertensives Complete

Last Saved: 18/06/2015 21:45:50.451

Description:

ID Search

#1 MeSH descriptor: [Cardiovascular Diseases] explode all trees

#2 (cardiovascular next/1 disease*):ab,ti

#3 (heart next/1 disease*):ab,ti

#4 (coronary near/2 disease*):ab,ti

#5 (arteriosclerosis or atherosclerosis):ab,ti

#6 angina*:ab,ti

#7 infarct*:ab,ti

#8 MeSH descriptor: [Stroke] explode all trees

#9 (stroke or strokes):ab,ti

#10 hypertens*:ab,ti

#11 ((blood or diastolic or systolic) near/2 pressure*):ab,ti

#12 MeSH descriptor: [Hyperlipidemias] explode all trees

#13 hyperlipid*:ab,ti

#14 hypercholesterol*:ab,ti

#15 cholesterol*:ab,ti

#16 hypercholester*emia*

#17 hyperlip*emia*:ab,ti

#18 triglycerid*:ab,ti

#19 hypertriglycerid*emia*:ab,ti

#20 hyperlipoprotein*emia*:ab,ti

#21 ldl:ab,ti

#22 hdl:ab,ti

#23 {or #1-#22}

#24 MeSH descriptor: [Primary Prevention] explode all trees

#25 prevent*:ab,ti or prophyla*:ab,ti

#26 #24 or #25

#27 MeSH descriptor: [Angiotensin-Converting Enzyme Inhibitors] explode all trees

#28 ((angiotensin* or dipeptidyl* or "kininase ii") near/3 (convert* or enzyme or inhibit* or recept* or block*)):ab,ti

#29 (ace near/1 inhibit*):ab,ti

#30 acei:ab,ti

#31 alacepril:ab,ti or altiopril:ab,ti or ancovenin:ab,ti or benazepril*:ab,ti or captopril:ab,ti or ceranapril:ab,ti or ceronapril:ab,ti or cilazapril:ab,ti or deacetylalacepril:ab,ti or delapril:ab,ti or derapril:ab,ti or enalapril*:ab,ti or epicaptopril:ab,ti or fasidotril*:ab,ti or fosinopril:ab,ti or foroxymithine:ab,ti or gemopatrilat:ab,ti or idrapril:ab,ti or ilepatril:ab,ti or imidapril*:ab,ti or indolapril:ab,ti or libenzapril:ab,ti or lisinopril:ab,ti or moexipril*:ab,ti or omapatrilat:ab,ti or pentopril*:ab,ti or perindopril*:ab,ti or pivopril:ab,ti or quinapril*:ab,ti or ramipril*:ab,ti or rentiapril:ab,ti or sampatrilat:ab,ti or saralasin:ab,ti or 's nitrosocaptopril':ab,ti or spirapril*:ab,ti or temocapril*:ab,ti or teprotide:ab,ti or trandolapril*:ab,ti or utibapril*:ab,ti or zabicipril*:ab,ti or zofenopril*:ab,ti or aceon:ab,ti or accupril:ab,ti or altace:ab,ti or capoten:ab,ti or lotensin:ab,ti or mavik:ab,ti or monopril:ab,ti or prinivil:ab,ti or univas:ab,ti or vasotec:ab,ti or zestril:ab,ti

#32 {or #27-#31}

#33 MeSH descriptor: [Angiotensin Receptor Antagonists] explode all trees

#34 (angiotensin near/3 receptor next/1 (antagon* or block*)):ab,ti

#35 arb:ab,ti or arbs:ab,ti

#36 abitesartan:ab,ti or azilsartan:ab,ti or candesartan:ab,ti or elisartan:ab,ti or embusartan:ab,ti or eprosartan:ab,ti or fimasartan:ab,ti or fonsartan:ab,ti or forasartan:ab,ti or irbesartan:ab,ti or 'kt3-671':ab,ti or losartan:ab,ti or milfasartan:ab,ti or olmesartan:ab,ti or pomisartan:ab,ti or pratosartan:ab,ti or ripisartan:ab,ti or saprisartan:ab,ti or sparsentan:ab,ti or tasosartan:ab,ti or telmisartan:ab,ti or valsartan:ab,ti or zolasartan:ab,ti or edarbi:ab,ti or blopress:ab,ti or atacand:ab,ti or amias:ab,ti or ratacand:ab,ti or eprozar:ab,ti or aprovel:ab,ti or karvea:ab,ti or avapro:ab,ti or cozaar:ab,ti or benicar:ab,ti or olmecip:ab,ti or micardis:ab,ti or diovan:ab,ti

#37 {or #33-#36}

#38 MeSH descriptor: [Calcium Channel Blockers] explode all trees

#39 (calcium near/2 (antagonist* or block* or inhibit*)):ab,ti

#40 amlodipine:ab,ti or aranidipine:ab,ti or azelnidipine:ab,ti or barnidipine:ab,ti or bencyclane:ab,ti or benidipine:ab,ti or bepridil:ab,ti or cilnidipine:ab,ti or cinnarizine:ab,ti or clentiazem:ab,ti or darodipine:ab,ti or diltiazem:ab,ti or efonidipine:ab,ti or elgodipine:ab,ti or etafenone:ab,ti or fantofarone:ab,ti or felodipine:ab,ti or fendiline:ab,ti or flunarizine:ab,ti or gallopamil:ab,ti or isradipine:ab,ti or lacidipine:ab,ti or lercanidipine:ab,ti or lidoflazine:ab,ti or lomerizine:ab,ti or manidipine:ab,ti or mibefradil:ab,ti or nicardipine:ab,ti or nifedipine:ab,ti or niguldipine:ab,ti or nilvadipine:ab,ti or nimodipine:ab,ti or nisoldipine:ab,ti or nitrendipine:ab,ti or perhexiline:ab,ti or prenylamine:ab,ti or semotiadil:ab,ti or terodiline:ab,ti or tiapamil:ab,ti or verapamil:ab,ti or adalat:ab,ti or afeditab:ab,ti or calan:ab,ti or cardene:ab,ti or cardizem:ab,ti or cartia:ab,ti or covera:ab,ti or dilacor:ab,ti or 'dilt-cd':ab,ti or diltzac:ab,ti or dynacirc:ab,ti or isoptin:ab,ti or nifedical:ab,ti or nifeditab:ab,ti or norvasc:ab,ti or plendil:ab,ti or procardia:ab,ti or sular:ab,ti or taztia:ab,ti or tiamate:ab,ti or tiazac:ab,ti or verelan:ab,ti

#41 {or #38-#40}

#42 MeSH descriptor: [Adrenergic alpha-Antagonists] explode all trees

#43 (adrenergic near/3 alpha near/3 (antagonist* or block* or receptor*)):ab,ti

#44 alfuzosin:ab,ti or bunazosin:ab,ti or doxazosin:ab,ti or prazosin:ab,ti or silodosin:ab,ti or tamsulosin:ab,ti or terazosin:ab,ti or trimazosin:ab,ti or cardura:ab,ti or hytrin:ab,ti or minipress:ab,ti

#45 {or #42-#44}

#46 MeSH descriptor: [Adrenergic beta-Antagonists] explode all trees

#47 (beta near/2 (antagonist* or block* or receptor*)):ab,ti

#48 acebutolol:ab,ti or adimolol:ab,ti or afurolol:ab,ti or alprenolol:ab,ti or amosulalol:ab,ti or arotinolol:ab,ti or atenolol:ab,ti or befunolol:ab,ti or betaxolol:ab,ti or bevantolol:ab,ti or bisoprolol:ab,ti or bopindolol:ab,ti or bornaprolol:ab,ti or brefonalol:ab,ti or bucindolol:ab,ti or bucumolol:ab,ti or bufetolol:ab,ti or bufuralol:ab,ti or bunitrolol:ab,ti or bunolol:ab,ti or bupranolol:ab,ti or butofilolol:ab,ti or butoxamine:ab,ti or carazolol:ab,ti or carteolol:ab,ti or carvedilol:ab,ti or celiprolol:ab,ti or cetamolol:ab,ti or chlortalidone:ab,ti and cloranolol:ab,ti or cyanoiodopindolol:ab,ti or cyanopindolol:ab,ti or deacetylmetipranolol:ab,ti or diacetolol:ab,ti or dihydroalprenolol:ab,ti or dilevalol:ab,ti or epanolol:ab,ti or esmolol:ab,ti or exaprolol:ab,ti or falintolol:ab,ti or flestolol:ab,ti or flusoxolol:ab,ti or hydroxybenzylpinodolol:ab,ti or hydroxycarteolol:ab,ti or hydroxymetoprolol:ab,ti or indenolol:ab,ti or iodocyanopindolol:ab,ti or iodopindolol:ab,ti or iprocrolol:ab,ti or isoxaprolol:ab,ti or labetalol:ab,ti or landiolol:ab,ti or levobunolol:ab,ti or levomoprolol:ab,ti or medroxalol:ab,ti or mepindolol:ab,ti or methylthiopropranolol:ab,ti or metipranolol:ab,ti or metoprolol:ab,ti or moprolol:ab,ti or nadolol:ab,ti or nebivolol:ab,ti or nifenalol:ab,ti or nipradilol:ab,ti or oxprenolol:ab,ti or pafenolol:ab,ti or pamatolol:ab,ti or penbutolol:ab,ti or pindolol:ab,ti or practolol:ab,ti or primidolol:ab,ti or prizidilol:ab,ti or procinolol:ab,ti or pronetalol:ab,ti or propranolol:ab,ti or proxodolol:ab,ti or ridazolol:ab,ti or salcardolol:ab,ti or soquinolol:ab,ti or sotalol:ab,ti or spirendolol:ab,ti or talinolol:ab,ti or tertatolol:ab,ti or tienoxolol:ab,ti or tilisolol:ab,ti or timolol:ab,ti or tolamolol:ab,ti or toliprolol:ab,ti or tribendilol:ab,ti or xibenolol:ab,ti or betapace:ab,ti or blocadren:ab,ti or bystolic:ab,ti or cartrol:ab,ti or coreg:ab,ti or corgard:ab,ti or inderal:ab,ti or kerlone:ab,ti or levatol:ab,ti or lopressor:ab,ti or normodyne:ab,ti or sectral:ab,ti or tenormin:ab,ti or toprol:ab,ti or trandate:ab,ti or visken:ab,ti or zebeta:ab,ti

#49 {or #46-#48}

#50 MeSH descriptor: [Sodium Potassium Chloride Symporter Inhibitors] explode all trees

#51 ((loop or ceiling) near/1 diuretic*):ab,ti

#52 bumetanide:ab,ti or ethacrynic:ab,ti and acid:ab,ti or furosemide:ab,ti or mefruside:ab,ti or muzolimine:ab,ti or piretanide:ab,ti or torsemide:ab,ti or xipamide:ab,ti or bumex:ab,ti or edecrin:ab,ti or lasix:ab,ti or demadex:ab,ti

#53 {or #50-#52}

#54 MeSH descriptor: [Thiazides] explode all trees

#55 MeSH descriptor: [Sodium Chloride Symporter Inhibitors] explode all trees

#56 bendroflumethiazide:ab,ti or chlorothiazide:ab,ti or chlorthalidone:ab,ti or cyclopenthiazide:ab,ti or hydrochlorothiazide:ab,ti or hydroflumethiazide:ab,ti or indapamide:ab,ti or methyclothiazide:ab,ti or metolazone:ab,ti or polythiazide:ab,ti or quinethazone:ab,ti or trichlormethiazide:ab,ti or thiazide*:ab,ti or aquatensen:ab,ti or chlotride:ab,ti or diucardin:ab,ti or diulo:ab,ti or diurese:ab,ti or diuril:ab,ti or enduron:ab,ti or esidrix:ab,ti or hydrodiuril:ab,ti or hydromox:ab,ti or hygroton:ab,ti or lozol:ab,ti or metahydrin:ab,ti or microzide:ab,ti or naqua:ab,ti or naturetin:ab,ti or oretic:ab,ti or renese:ab,ti or saluron:ab,ti or thalitone:ab,ti or zaroxolyn:ab,ti or zide:ab,ti

#57 {or #54-#56}

#58 MeSH descriptor: [Mineralocorticoid Receptor Antagonists] explode all trees

#59 ((mineralocorticoid or aldosterone) near/3 (antagonist* or block*)):ab,ti

#60 "canrenoic acid":ab,ti or canrenone:ab,ti or eplerenone:ab,ti or finerenone:ab,ti or "oxprenoate potassium":ab,ti or spironolactone:ab,ti or aldactone:ab,ti or contaren:ab,ti or inspra:ab,ti or luvion:ab,ti or phanurane:ab,ti or spiroletan:ab,ti

#61 {or #58-#60}

#62 MeSH descriptor: [Antihypertensive Agents] explode all trees

#63 #32 or #37 or #41 or #45 or #49 or #53 or #57 or #61 or #62

#64 #23 and #26 and #63 Publication Year from 2005 to 2015

PROSPERO searches--Run 6/19/2015
http://www.crd.york.ac.uk/PROSPERO/

We ran two searches in PROSPERO, copied the results to Excel, then de-duplicated the set.

Search 1
prevention [all fields] AND
blood pressure [Condition/Domain]
36 records retrieved

Search 2
prevention [all fields] AND
hypertension [Condition/Domain]
38 records retrieved

There were 74 records total and 64 records after deduplication.

Registration no.	Title	Status
CRD42011001125	Blockade of the renin angio-tensin system for primary prevention of non-valvular atrial fibrillation: a systematic review and meta analysis of randomized controlled trials	
CRD42011001224	Physical activity change from adolescence to adulthood and incidence of the chronic non-communicable diseases: a systematic review and a pooled analysis	Abandoned
CRD42012001975	Exercise and physical activity in the prevention of preeclampsia: systematic review	Published
CRD42012002379	Effect of dietary sugar intake on blood pressure	Ongoing
CRD42012002662	Maternal vitamin D status in relation to preeclampsia: a systematic review and meta-analysis of observational studies	Ongoing
CRD42012002675	Personal financial incentives for changing habitual health-related behaviours: a systematic review and meta-analysis	Ongoing
CRD42012002791	Long-term high protein versus low protein dietary regimens and their outcome on cardiovascular and metabolic risk factors: a systematic review and meta-analysis	Published
CRD42012003174	Systematic review and meta-analysis of remote ischaemic preconditioning in preventing organ injury especially myocardial injury during cardiac surgery	Ongoing
CRD42013003906	Impact of different lifestyle programmes (diet+exercise, diet, exercise) on anthropometric outcomes and cardiovascular risk factors in overweight/obese subjects: a systematic review and network meta-analysis	Completed
CRD42013004060	Effects of low-sodium high-potassium consumption on blood pressure: a systematic review and meta-analysis	Ongoing
CRD42013004445	Strategies to increase sustained physical activity as part of lower limb osteoarthritis management: a systematic review	Completed
CRD42013004720	Effect of green tea consumption on obesity and hypertension: a systematic review	Ongoing
CRD42013004818	Effect of fruit and vegetable consumption on cardiovascular health in adolescents: a systematic review	Ongoing
CRD42013004934	Ghrelin for chronic heart failure	Ongoing
CRD42013005261	Effects of polydextrose on appetite and energy intake: a systematic review and meta-analysis	Ongoing

CRD42013005651	Hypertensive disorders of pregnancy: a systematic review of recent international clinical practice guidelines	Ongoing
CRD42013005810	Low-dose intraoperative ketamine for prevention of post-anesthetic shivering: a systematic review protocol	Ongoing
CRD42013005811	Effectiveness of high-intensity interval training in patients with coronary heart disease: a systematic review protocol	Ongoing
CRD42013005989	Diabetes, metabolic syndrome, and the risk of glaucoma: a meta-analysis	Ongoing
CRD42013006210	The management of long term conditions experienced by people with learning disabilities	Ongoing
CRD42013006312	Vitamin E supplementation for preventing recurrent stroke and other vascular events in patients with stroke or transient ischaemic attack [Cochrane Protocol]	Ongoing
CRD42013006375	The effectiveness of yoga in modifying risk factors of cardiovascular disease and metabolic syndrome: a systematic review and meta-analysis	Completed
CRD42013006468	Predictive value of 24-hours ambulatory blood pressure monitoring of functional outcome in acute ischemic stroke: a systematic review and meta-analysis	Ongoing
CRD42013006755	Pharmacological treatment of hypertension in obesity	Ongoing
CRD42014004432	Effectiveness of behavioral interventions to reduce the intake of sugar sweetened beverages among children and adolescents: a systematic review	Ongoing
CRD42014006964	Prognostic value of basal cardiac troponin levels on major adverse cardiovascular events and mortality in the general population	Ongoing
CRD42014007067	Comparative effectiveness of angiotensin receptor blockers for the primary prevention of cardiovascular and cerebrovascular outcomes: a meta-analysis	Ongoing
CRD42014007404	Systematic review of knowledge translation studies in nutrition in cardiovascular disease	Ongoing
CRD42014007571	Health programs in management of chronic disease in elderly and impact on clinical outcome	Ongoing
CRD42014009231	Non-invasive cardiac imaging parameters predicting clinical outcome in pulmonary hypertension: a systematic review of prognostic studies	Ongoing
CRD42014009289	Interventions for nausea and vomiting prophylaxis during and after regional anaesthesia caesarean delivery: network meta-analysis	Completed
CRD42014009604	Systematic review: effectiveness of physical activity and exercise interventions for reducing blood pressure in young adult populations with established cardiovascular risk factors	Ongoing
CRD42014009627	The effectiveness of care provided by nurse practitioners in a community setting: a systematic review and meta-analysis	Ongoing
CRD42014010005	Efficacy and safety of non-steroidal anti-inflammatory drugs in the prevention of heterotopic bone formation after primary hip arthroplasty: A network meta-analysis	Ongoing
CRD42014010171	Educational interventions for improving control of blood pressure in patients with hypertension	Ongoing
CRD42014010495	Effects of whole body vibration in individuals with type 2 diabetes mellitus: a systematic review and meta-analysis of randomized clinical trials	Completed

CRD42014010561	Incentive-based worksite environmental interventions for preventing obesity: a systematic review and meta-analysis (Protocol)	Ongoing
CRD42014010591	The effects of probiotics on the cardiovascular risk biomarkers: a systematic review and meta-analysis	Ongoing
CRD42014010596	The number of aspirin doses (e.g. once versus twice daily, alternate days) and the timing of aspirin intake (e.g. evening versus morning) in primary and secondary prevention of cardiovascular disease: a systematic review of the evidence	Ongoing
CRD42014010689	CCR5 gene 32 del is a susceptibility factor for atherosclerosis in Asian population	Ongoing
CRD42014013327	Healthcare provision for truck drivers in sub-Saharan Africa: A systematic review of interventions, methods of evaluation and impact	Ongoing
CRD42014013417	The effectiveness of cognitive behavioral interventions in reducing stress among nurses working in hospitals: a systematic review protocol	Ongoing
CRD42014014442	Effectiveness of interventions in primary care to improve glycated haemoglobin (HbA1c) and cardiovascular risk factor levels in patients with poorly-controlled type 2 diabetes mellitus: a systematic review	Ongoing
CRD42014014938	Efficacy of electrotherapy in the Bell's Palsy treatment: systematic review protocol	Ongoing
CRD42014015119	Paleolithic nutrition for metabolic syndrome	Ongoing
CRD42014015318	Effectiveness of low-dose aspirin versus calcium supplementation for the prevention of pre-eclampsia: a protocol for a systematic review and network meta-analysis with indirect comparisons	Ongoing
CRD42014015602	Omega 3 fatty acids and cardiovascular disease: update	Ongoing
CRD42015015751	Effectiveness of vital signs monitoring on general hospital wards to detect deterioration or prevent adverse events	Ongoing
CRD42015016018	Whether tea extract supplementation should benefit metabolic syndrome and obesity	Ongoing
CRD42015016222	A systematic review (and meta-analysis) to identify psychological determinants of medication adherence in stroke survivors: a review of observational studies: protocol for a systematic review and planned meta-analysis	Ongoing
CRD42015016263	Prevalence of hypertension among teenager Brazilian students: systematic review and meta-analysis	Ongoing
CRD42015016272	Dietary patterns and blood pressure in adults: a systematic review and meta-analysis	Completed
CRD42015016352	Systematic literature review identifying (sub-)behaviors related to the risk factors of type 2 diabetes in vulnerable groups	Ongoing
CRD42015016450	Systematic review of rehabilitation programmes initiated within 90 days of a TIA or 'minor' stroke	Ongoing
CRD42015016538	Effects of resistance training on metabolic syndrome: a systematic review and meta-analysis of randomized controlled trials	Ongoing
CRD42015016659	Association between hematocrit and cardiovascular disease: a meta-analysis of interventional studies	Ongoing

CRD42015017371	Safety and efficacy of catheter direct thrombolysis in management of acute iliofemoral deep venous thrombosis (DVT)	Ongoing
CRD42015017823	Dairy products and blood pressure in children: a meta-analysis and systematic review of prospective cohort studies	Ongoing
CRD42015019076	Screening for hypertension in overweight and obese children and adolescents to prevent cardiovascular disease	Ongoing
CRD42015020262	Benefits and harms of the Mediterranean diet compared to other dietary interventions	Ongoing
CRD42015020638	Omega-3 fatty acids and maternal and child health	Ongoing
CRD42015020758	Evidence for primary prevention of diabetes and cardiovascular disease in people with intellectual disabilities: a systematic review of the effectiveness of lifestyle interventions aimed at reducing modifiable risk factors	Ongoing
CRD42015023296	Traditional Chinese herbal medicine for isolated systolic hypertension: a systemic review	Ongoing
CRD42015023444	Drugs for primary prevention of atherosclerotic cardiovascular diseases: an overview of reviews and systematic review of combinations	Ongoing

3. Statins

Database searched	Date searched	Results
Ovid MEDLINE(R) 1946 to June Week 2 2015	6/18/2015	272
EMBASE (embase.com)	6/18/2015	228
Cochrane Database of Systematic Reviews : Issue 6 of 12, June 2015 (Cochrane Library—Wiley)	6/18/2015	20
Database of Abstracts of Reviews of Effect : Issue 2 of 4, April 2015 (Cochrane Library—Wiley)	6/18/2015	46
Health Technology Assessment Database : Issue 2 of 4, April 2015 (Cochrane Library—Wiley)	6/18/2015	7
Total		**573**
After de-duplication		**502**

We also searched PROSPERO which retrieved 8 records.

See the details of each database search strategy below.

Ovid MEDLINE(R) 1946 to June Week 1 2015

1. exp Cardiovascular Diseases/
2. cardiovascular disease*.tw.
3. heart disease*.tw.
4. (coronary adj2 disease*).tw.
5. (arteriosclerosis or atherosclerosis).tw.
6. angina*.tw.
7. infarct*.tw.
8. exp Stroke/
9. (stroke or strokes).tw.
10. hypertens*.tw.
11. ((blood or diastolic or systolic) adj2 pressure*).tw.
12. exp Hyperlipidemias/
13. hyperlipid*.tw.
14. hypercholesterol*.tw.
15. cholesterol*.tw.
16. hypercholester?emia*.tw.
17. hyperlip?emia*.tw.
18. triglycerid*.tw.
19. hypertriglycerid?emia*.tw.
20. hyperlipoprotein?emia*.tw.
21. ldl.tw.
22. hdl.tw.
23. or/1-22
24. exp Hydroxymethylglutaryl-CoA Reductase Inhibitors/
25. hydroxymethylglutaryl*.tw.
26. HMG-CoA*.tw.
27. (statin or statins).tw.
28. (atorvastatin or lipitor or cerivastatin or baycol or compactin or fluvastatin or fluindostatin or lescol or lovastatin or mevacor or mevinolin or pitavastatin or pitava or livalo or pravastatin or pravachol or lipostat or rosuvastatin or crestor or simvastatin or zocor).tw.
29. or/24-28
30. exp Primary Prevention/
31. (prevent* or prophyla*).tw.
32. 30 or 31
33. 23 and 29 and 32
34. (MEDLINE or systematic review).tw. or meta analysis.pt.
35. 33 and 34
36. limit 35 to yr="2005 -Current"

EMBASE (embase.com)

No. Query Results

#36 #35 AND [embase]/lim NOT [medline]/lim 228

#35 #32 AND #33 AND [2005-2015]/py 670

#34 #32 AND #33 791

#33 (meta NEXT/1 analysis):ab,ti OR (systematic NEXT/1 review):ab,ti OR medline:ab,ti 175120

#32 #23 AND #28 AND #31 18878

#31 #29 OR #30 1492390

#30 prevent*:ab,ti OR prophyla*:ab,ti 1482728

#29 'primary prevention'/exp 29791

#28 #24 OR #25 OR #26 OR #27 112416

#27 atorvastatin:ab,ti OR lipitor:ab,ti OR cerivastatin:ab,ti OR baycol:ab,ti OR compactin:ab,ti OR fluvastatin:ab,ti OR fluindostatin:ab,ti OR lescol:ab,ti OR lovastatin:ab,ti OR mevacor:ab,ti OR mevinolin:ab,ti OR pitavastatin:ab,ti OR pitava:ab,ti OR livalo:ab,ti OR pravastatin:ab,ti OR pravachol:ab,ti OR lipostat:ab,ti OR rosuvastatin:ab,ti OR crestor:ab,ti OR simvastatin:ab,ti OR zocor:ab,ti 29058

#26 statin:ab,ti OR statins:ab,ti 39843

#25 (hmg NEXT/1 coa*):ab,ti 9352

#24 'hydroxymethylglutaryl coenzyme a reductase inhibitor'/exp 102417

#23 #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 3867712

#22 hdl:ab,ti 72676

#21 ldl:ab,ti 81658

#20 hyperlipoprotein*emia*:ab,ti 5512

#19 hypertriglycerid*emia*:ab,ti 13464

#18 triglycerid*:ab,ti 116755

#17 hyperlip*emia*:ab,ti 39163

#16 hypercholester*emia*:ab,ti 34133

#15 cholesterol*:ab,ti 256170

#14 hypercholesterol*:ab,ti 38597

#13 hyperlipid*:ab,ti 35011

#12 'hyperlipidemia'/exp 123087

#11 ((blood OR diastolic OR systolic) NEAR/2 pressure*):ab,ti 366491

#10 hypertens*:ab,ti 494976

#9 stroke:ab,ti OR strokes:ab,ti 245313

#8 'cerebrovascular accident'/exp 227861

#7 infarct*:ab,ti 312247

#6 angina*:ab,ti 67931

#5 arteriosclerosis:ab,ti OR atherosclerosis:ab,ti 136361

#4 (coronary NEAR/2 disease*):ab,ti 161876

#3 (heart NEXT/1 disease*):ab,ti 183079

#2 (cardiovascular NEXT/1 disease*):ab,ti 151470

#1 'cardiovascular disease'/exp 3399341

Cochrane Library (CDSR, DARE, HTA)

Search Name: CMMI MITRE Overviews Statins Complete

Last Saved: 18/06/2015 15:57:39.906

ID	Search
#1	MeSH descriptor: [Cardiovascular Diseases] explode all trees
#2	(cardiovascular next/1 disease*):ab,ti
#3	(heart next/1 disease*):ab,ti
#4	(coronary near/2 disease*):ab,ti
#5	(arteriosclerosis or atherosclerosis):ab,ti
#6	angina*:ab,ti
#7	infarct*:ab,ti
#8	MeSH descriptor: [Stroke] explode all trees
#9	(stroke or strokes):ab,ti
#10	hypertens*:ab,ti
#11	((blood or diastolic or systolic) near/2 pressure*):ab,ti
#12	MeSH descriptor: [Hyperlipidemias] explode all trees
#13	hyperlipid*:ab,ti
#14	hypercholesterol*:ab,ti
#15	cholesterol*:ab,ti
#16	hypercholester*emia*
#17	hyperlip*emia*:ab,ti
#18	triglycerid*:ab,ti
#19	hypertriglycerid*emia*:ab,ti
#20	hyperlipoprotein*emia*:ab,ti
#21	ldl:ab,ti
#22	hdl:ab,ti
#23	{or #1-#22}
#24	MeSH descriptor: [Primary Prevention] explode all trees
#25	prevent*:ab,ti or prophyla*:ab,ti
#26	#24 or #25
#27	MeSH descriptor: [Hydroxymethylglutaryl-CoA Reductase Inhibitors] explode all trees
#28	(hmg next/1 coa*):ab,ti
#29	statin:ab,ti or statins:ab,ti
#30	atorvastatin:ab,ti or lipitor:ab,ti or cerivastatin:ab,ti or baycol:ab,ti or compactin:ab,ti or fluvastatin:ab,ti or fluindostatin:ab,ti or lescol:ab,ti or lovastatin:ab,ti or mevacor:ab,ti or mevinolin:ab,ti or pitavastatin:ab,ti or pitava:ab,ti or livalo:ab,ti or pravastatin:ab,ti or pravachol:ab,ti or lipostat:ab,ti or rosuvastatin:ab,ti or crestor:ab,ti or simvastatin:ab,ti or zocor:ab,ti

#31 {or #27-#30}

#32 #23 and #26 and #31 Publication Year from 2005 to 2015

Prospero search--Run 6/18/2015
http://www.crd.york.ac.uk/PROSPERO/

Search:

cardiovascular [all fields] AND
prevention [all fields] AND
statin [all fields]

8 records retrieved

Registration no.	Title	Status
CRD42015023444	Drugs for primary prevention of atherosclerotic cardiovascular diseases: an overview of reviews and systematic review of combinations	Ongoing
CRD42014013687	Efficacy and risk of harms of ezetimibe in hyperlipidemic patients with or without atherosclerosis and/or diabetes mellitus	Ongoing
CRD42014009589	The effectiveness of statins for the prevention of cardiovascular disease in individuals with severe mental illness	Ongoing
CRD42014007628	Whole-grain and blood lipid changes in apparently healthy adults: a systematic review and meta-analysis of controlled trials	Ongoing
CRD42014007084	The prognostic effect of cardiac rehabilitation in the era of acute revascularization and statin therapy: a systematic review and meta-analysis of randomized and non-randomized studies. The Cardiac Rehabilitation Outcome Study (CROS)	Ongoing
CRD42012003397	Safety and efficacy of Red Yeast Rice in dyslipidemia and cardiovascular risk reduction	Published
CRD42012002034	Whole-grain and body weight changes in apparently healthy adults: a systematic review and meta-analysis of controlled trials	Published
CRD42011001470	Comparative efficacy of statins for the primary and secondary prevention of cardiovascular disease: a network meta-analysis	Ongoing

4. Tobacco Cessation

Database searched	Date searched	Results
Ovid MEDLINE(R) 1946 to June Week 2 2015	6/19/2015	23
EMBASE (embase.com)	6/19/2015	57
Cochrane Database of Systematic Reviews : Issue 6 of 12, June 2015 (Cochrane Library—Wiley)	6/19/2015	4
Database of Abstracts of Reviews of Effect : Issue 2 of 4, April 2015 (Cochrane Library—Wiley)	6/19/2015	5
Health Technology Assessment Database : Issue 2 of 4, April 2015 (Cochrane Library—Wiley)	6/19/2015	1
Total		**90**
After de-duplication		**79**

We also searched PROSPERO which retrieved 21 records.

See the details of each database search strategy below.

Ovid MEDLINE(R) 1946 to June Week 2 2015

1. exp Cardiovascular Diseases/
2. cardiovascular disease*.tw.
3. heart disease*.tw.
4. (coronary adj2 disease*).tw.
5. (arteriosclerosis or atherosclerosis).tw.
6. angina*.tw.
7. infarct*.tw.
8. exp Stroke/
9. (stroke or strokes).tw.
10. hypertens*.tw.
11. ((blood or diastolic or systolic) adj2 pressure*).tw.
12. exp Hyperlipidemias/
13. hyperlipid*.tw.
14. hypercholesterol*.tw.
15. cholesterol*.tw.
16. hypercholester?emia*.tw.
17. hyperlip?emia*.tw.
18. triglycerid*.tw.
19. hypertriglycerid?emia*.tw.
20. hyperlipoprotein?emia*.tw.
21. ldl.tw.
22. hdl.tw.
23. or/1-22
24. Bupropion/
25. (bupropion or varenicline or Aplenzin or Budeprion or Buproban or Chantix or Forfivo or Quomen or Wellbutrin or Zyban or Zyntabac).tw.
26. "Tobacco Use Cessation Products"/
27. (nicotine adj2 (replace* or patch* or gum or nasal spray or lozenge* or tablet*)).tw.
28. or/24-27
29. 23 and 28
30. (MEDLINE or systematic review).tw. or meta analysis.pt.
31. 29 and 30
32. limit 31 to yr="2005 -Current"

EMBASE (embase.com)

No. Query Results

#34 #33 AND [embase]/lim NOT [medline]/lim 57

#33 #32 AND [2005-2015]/py 201

#32 #30 AND #31 247

#31 (meta NEXT/1 analysis):ab,ti OR (systematic NEXT/1 review):ab,ti OR medline:ab,ti 175230

#30 #23 AND #29 4696

#29 #24 OR #25 OR #26 OR #27 OR #28 21141

#28 (nicotine NEAR/2 (replace* OR patch* OR gum OR 'nasal spray' OR lozenge* OR tablet*)):ab,ti 4827

#27 'nicotine gum'/de OR 'nicotine lozenge'/de OR 'nicotine patch'/de OR 'nicotine vaccine'/de 3508

#26 bupropion:ab,ti OR varenicline:ab,ti OR aplenzin:ab,ti OR budeprion:ab,ti OR buproban:ab,ti OR chantix:ab,ti OR forfivo:ab,ti OR quomen:ab,ti OR wellbutrin:ab,ti OR zyban:ab,ti OR zyntabac:ab,ti 5583

#25 'varenicline'/de 2843

#24 'amfebutamone'/de 14579

#23 #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 3868441

#22 hdl:ab,ti 72676

#21 ldl:ab,ti 81658

#20 hyperlipoprotein*emia*:ab,ti 5512

#19 hypertriglycerid*emia*:ab,ti 13464

#18 triglycerid*:ab,ti 116755

#17 hyperlip*emia*:ab,ti 39179

#16 hypercholester*emia*:ab,ti 34133

#15 cholesterol*:ab,ti 256170

#14 hypercholesterol*:ab,ti 38597

#13 hyperlipid*:ab,ti 35011

#12 'hyperlipidemia'/exp 123087

#11 ((blood OR diastolic OR systolic) NEAR/2 pressure*):ab,ti 366491

#10 hypertens*:ab,ti 494976

#9 stroke:ab,ti OR strokes:ab,ti 245313

#8 'cerebrovascular accident'/exp 227861

#7 infarct*:ab,ti 312247

#6 angina*:ab,ti 67931

#5 arteriosclerosis:ab,ti OR atherosclerosis:ab,ti 136436

#4 (coronary NEAR/2 disease*):ab,ti 161876

#3 (heart NEXT/1 disease*):ab,ti 183079

#2 (cardiovascular NEXT/1 disease*):ab,ti 151470

#1 'cardiovascular disease'/exp 3399341

Cochrane Library (CDSR, DARE, HTA)

Search Name: CMMI MITRE Overviews Tobacco Cessation Complete

ID Search

#1 MeSH descriptor: [Cardiovascular Diseases] explode all trees

#2 (cardiovascular next/1 disease*):ab,ti

#3 (heart next/1 disease*):ab,ti

#4 (coronary near/2 disease*):ab,ti

#5 (arteriosclerosis or atherosclerosis):ab,ti

#6 angina*:ab,ti

#7 infarct*:ab,ti

#8 MeSH descriptor: [Stroke] explode all trees

#9 (stroke or strokes):ab,ti

#10 hypertens*:ab,ti

#11 ((blood or diastolic or systolic) near/2 pressure*):ab,ti

#12 MeSH descriptor: [Hyperlipidemias] explode all trees

#13 hyperlipid*:ab,ti

#14 hypercholesterol*:ab,ti

#15 cholesterol*:ab,ti

#16 hypercholester*emia*

#17 hyperlip*emia*:ab,ti

#18 triglycerid*:ab,ti

#19 hypertriglycerid*emia*:ab,ti

#20 hyperlipoprotein*emia*:ab,ti

#21 ldl:ab,ti

#22 hdl:ab,ti

#23 {or #1-#22}

#24 MeSH descriptor: [Bupropion] this term only

#25 bupropion:ab,ti or varenicline:ab,ti or aplenzin:ab,ti or budeprion:ab,ti or buproban:ab,ti or chantix:ab,ti or forfivo:ab,ti or quomen:ab,ti or wellbutrin:ab,ti or zyban:ab,ti or zyntabac:ab,ti

#26 MeSH descriptor: [Tobacco Use Cessation Products] this term only

#27 (nicotine near/2 (replace* or patch* or gum or "nasal spray" or lozenge* or tablet*)):ab,ti

#28 {or #24-#27}

#29 #23 and #28 Publication Year from 2005 to 2015

PROSPERO searches--Run 6/19/2015
http://www.crd.york.ac.uk/PROSPERO/

Search:
cardiovascular [all fields] AND
tobacco [all fields]
21 records retrieved

Registration no.	Title	Status
CRD42015023444	Drugs for primary prevention of atherosclerotic cardiovascular diseases: an overview of reviews and systematic review of combinations	Ongoing
CRD42015022095	Barriers and facilitators of lifestyle self-management among South Asians post myocardial infarction	Ongoing
CRD42015020923	Systematic review of nutrition and physical activity interventions for people with substance use disorders	Ongoing
CRD42015020919	Systematic review of nutrition and physical activity interventions for people with alcohol disorders	Ongoing
CRD42015018971	Portion, package or tableware size for changing selection and consumption of food, alcohol and tobacco [Cochrane Protocol]	Ongoing
CRD42015016886	Prevalence and determinants of cardiovascular risk factors among adolescents in Africa: a systematic review	Ongoing
CRD42015013321	The adverse clinical effects of waterpipe smoking	Ongoing
CRD42014013586	Will parental smoking increase the risk of congenital heart defect? A systematic review and meta-analysis	Ongoing
CRD42014013553	The effect of parental and environmental smoke on childhood leukemia incidence: a systematic review and meta-analysis	Ongoing
CRD42014010834	Duration of residence as an independent risk factor for coronary artery disease among first generation immigrants to Western countries: a systematic review	Ongoing
CRD42014010449	Availability, use and barriers to cardiac rehabilitation in low- and middle-income countries: a systematic review	Ongoing
CRD42013006479	Economic evaluation of interventions or strategies for cardiovascular disease and type 2 diabetes mellitus management in South Asia	Ongoing
CRD42013005811	Effectiveness of high-intensity interval training in patients with coronary heart disease: a systematic review protocol	Ongoing

Registration no.	Title	Status
CRD42013005696	The link Between COPD and smoking: a systematic review and meta analysis	Ongoing
CRD42013004160	A systematic review of interventions to manage cardiovascular disease risk in people with severe mental illness	Ongoing
CRD42013004118	The effectiveness of motivational interviewing on lifestyle modification, physiological and health outcomes in clients at risk of or with diagnosed cardiovascular diseases: a systematic review protocol	Ongoing
CRD42013003898	Cardiovascular risk factors and cardiovascular risk in patients with a severe mental illness: a systematic review	Ongoing
CRD42012002675	Personal financial incentives for changing habitual health-related behaviours: a systematic review and meta-analysis	Ongoing
CRD42012002538	Secondary prevention lifestyle interventions for transient ischaemic attack, stroke: a systematic review	Published
CRD42012002500	Health system and health service research on Sudan: systematic review	Ongoing
CRD42012002277	The effectiveness of telephone counselling for reducing cardiovascular risks in community-dwelling adults: a systematic review protocol	

5. Combination therapy

Database searched	Date searched	Results
Ovid MEDLINE(R) 1946 to June Week 4 2015	07/08/2015	810
EMBASE (embase.com)	07/08/2015	596
Cochrane Central Register of Controlled Trials : Issue 6 of 12, June 2015	07/08/2015	2,878
Cochrane Database of Systematic Reviews : Issue 6 of 12, June 2015 (Cochrane Library—Wiley)	07/08/2015	29
Database of Abstracts of Reviews of Effect : Issue 2 of 4, April 2015 (Cochrane Library—Wiley)	07/08/2015	228
Health Technology Assessment Database : Issue 2 of 4, April 2015 (Cochrane Library—Wiley)	07/08/2015	16
Conference Proceedings Citation Index-Science (CPCI-S) -- 1990-present (Web of Science)	07/08/2015	316
Total		**4,873**
After de-duplication		**4,081**

We limited retrieval to trials published from 1990 to 2015. For MEDLINE, we used the McMaster single-term filter with the best balance of sensitivity and specificity for retrieving randomized controlled trials (Haynes 2005) and translated the same from Ovid to embase.com syntax for use in EMBASE. We limited the EMBASE retrieval to embase-only records and removed MEDLINE records ([embase]/lim NOT [medline]/lim). For Conference Proceedings Citation Index-Science we used a multi-term search filter for identifying trials. We did not apply any trials filters to the Cochrane Library search.

Haynes, R. B., McKibbon, K. A., Wilczynski, N. L., Walter, S. D., & Werre, S. R. (2005). Optimal search strategies for retrieving scientifically strong studies of treatment from Medline: analytical survey. BMJ, 330(7501), 1179. doi: bmj.38446.498542.8F.

See the details of each database search strategy below.

Ovid MEDLINE(R) 1946 to June Week 4 2015
Trials Search MEDLINE Complete 4b

1. exp Cardiovascular Diseases/
2. cardiovascular disease*.tw.
3. heart disease*.tw.
4. (coronary adj2 disease*).tw.
5. (arteriosclerosis or atherosclerosis).tw.
6. angina*.tw.
7. infarct*.tw.
8. exp Stroke/
9. (stroke or strokes).tw.
10. hypertens*.tw.
11. ((blood or diastolic or systolic) adj2 pressure*).tw.
12. exp Hyperlipidemias/
13. hyperlipid*.tw.
14. hypercholesterol*.tw.
15. cholesterol*.tw.
16. hypercholester?emia*.tw.
17. hyperlip?emia*.tw.
18. triglycerid*.tw.
19. hypertriglycerid?emia*.tw.
20. hyperlipoprotein?emia*.tw.
21. ldl.tw.
22. hdl.tw.
23. or/1-22
24. Aspirin/
25. (aspirin or dispril or polopiryna or zorprin or acetylsalicylic acid or polopirin or colfarit or aloxiprimum or micristin or easprin or magnecyl or solprin or ecotrin or "2-(acetyloxy)benzoic acid" or endosprin or acylpyrin or solupsan or acetysal).tw.
26. ((acetylsalicylic or (acetyl adj salicylic)) adj acid*).tw.
27. or/24-26
28. exp Hydroxymethylglutaryl-CoA Reductase Inhibitors/
29. hydroxymethylglutaryl*.tw.
30. HMG-CoA*.tw.
31. (statin or statins).tw.
32. (atorvastatin or lipitor or cerivastatin or baycol or compactin or fluvastatin or fluindostatin or lescol or lovastatin or mevacor or mevinolin or pitavastatin or pitava or livalo or pravastatin or pravachol or lipostat or rosuvastatin or crestor or simvastatin or zocor).tw.
33. or/28-32
34. exp Angiotensin-Converting Enzyme Inhibitors/
35. ((angiotensin* or dipeptidyl* or kininase ii) adj3 (convert* or enzyme or inhibit* or recept* or block*)).tw.
36. (ace adj inhibit*).tw.
37. acei.tw.
38. (alacepril or altiopril or ancovenin or benazepril* or captopril or ceranapril or ceronapril or cilazapril or deacetylalacepril or delapril or derapril or enalapril* or epicaptopril or fasidotril* or fosinopril or foroxymithine or gemopatrilat or idrapril or ilepatril or imidapril* or indolapril or

libenzapril or lisinopril or moexipril* or omapatrilat or pentopril* or perindopril* or pivopril or quinapril* or ramipril* or rentiapril or sampatrilat or saralasin or s nitrosocaptopril or spirapril* or temocapril* or teprotide or trandolapril* or utibapril* or zabicipril* or zofenopril* or Aceon or Accupril or Altace or Capoten or Lotensin or Mavik or Monopril or Prinivil or Univas or Vasotec or Zestril).tw.
39. or/34-38
40. exp Angiotensin Receptor Antagonists/
41. (angiotensin adj3 (receptor antagon* or receptor block*)).tw.
42. arb?.tw.
43. (abitesartan or azilsartan or candesartan or elisartan or embusartan or eprosartan or fimasartan or fonsartan or forasartan or irbesartan or KT3-671 or losartan or milfasartan or olmesartan or pomisartan or pratosartan or ripisartan or saprisartan or sparsentan or tasosartan or telmisartan or valsartan or zolasartan or Edarbi or Blopress or Atacand or Amias or Ratacand or Eprozar or Aprovel or Karvea or Avapro or Cozaar or Benicar or Olmecip or Micardis or Diovan).tw.
44. or/40-43
45. exp Calcium Channel Blockers/
46. (calcium adj2 (antagonist? or block* or inhibit*)).tw.
47. (amlodipine or aranidipine or azelnidipine or barnidipine or bencyclane or benidipine or bepridil or cilnidipine or cinnarizine or clentiazem or darodipine or diltiazem or efonidipine or elgodipine or etafenone or fantofarone or felodipine or fendiline or flunarizine or gallopamil or isradipine or lacidipine or lercanidipine or lidoflazine or lomerizine or manidipine or mibefradil or nicardipine or nifedipine or niguldipine or nilvadipine or nimodipine or nisoldipine or nitrendipine or perhexiline or prenylamine or semotiadil or terodiline or tiapamil or verapamil or Adalat or Afeditab or Calan or Cardene or Cardizem or Cartia or Covera or Dilacor XR or Dilt-CD or Diltzac or DynaCirc or Isoptin or Nifedical or Nifeditab or Norvasc or Plendil or Procardia or Sular or Taztia or Tiamate or Tiazac or Verelan).tw.
48. or/45-47
49. exp Adrenergic alpha-Antagonists/
50. (adrenergic adj3 alpha adj3 (antagonist? or block* or receptor?)).tw.
51. (alfuzosin or bunazosin or doxazosin or prazosin or silodosin or tamsulosin or terazosin or trimazosin or Cardura or Hytrin or Minipress).tw.
52. or/49-51
53. exp Adrenergic beta-Antagonists/
54. (beta adj2 (antagonist? or block* or receptor?)).tw.
55. (acebutolol or adimolol or afurolol or alprenolol or amosulalol or arotinolol or atenolol or befunolol or betaxolol or bevantolol or bisoprolol or bopindolol or bornaprolol or brefonalol or bucindolol or bucumolol or bufetolol or bufuralol or bunitrolol or bunolol or bupranolol or butofilolol or butoxamine or carazolol or carteolol or carvedilol or celiprolol or cetamolol or chlortalidone cloranolol or cyanoiodopindolol or cyanopindolol or deacetylmetipranolol or diacetolol or dihydroalprenolol or dilevalol or epanolol or esmolol or exaprolol or falintolol or flestolol or flusoxolol or hydroxybenzylpinodolol or hydroxycarteolol or hydroxymetoprolol or indenolol or iodocyanopindolol or iodopindolol or iprocrolol or isoxaprolol or labetalol or landiolol or levobunolol or levomoprolol or medroxalol or mepindolol or methylthiopropranolol or metipranolol or metoprolol or moprolol or nadolol or oxprenolol or penbutolol or pindolol or nadolol or nebivolol or nifenalol or nipradilol or oxprenolol or pafenolol or pamatolol or penbutolol or pindolol or practolol or primidolol or prizidilol or procinolol or pronetalol or propranolol or proxodolol or ridazolol or salcardolol or soquinolol or sotalol or spirendolol or

talinolol or tertatolol or tienoxolol or tilisolol or timolol or tolamolol or toliprolol or tribendilol or xibenolol or Betapace or Blocadren or Bystolic or Cartrol or Coreg or Corgard or Inderal or Kerlone or Levatol or Lopressor or Normodyne or Sectral or Tenormin or Toprol or Trandate or Visken or Zebeta).tw.
56. or/53-55
57. exp Sodium Potassium Chloride Symporter Inhibitors/
58. ((loop or ceiling) adj diuretic?).tw.
59. (bumetanide or ethacrynic acid or furosemide or mefruside or muzolimine or piretanide or torsemide or xipamide or Bumex or Edecrin or Lasix or Demadex).tw.
60. or/57-59
61. exp Thiazides/
62. exp Sodium Chloride Symporter Inhibitors/
63. (bendroflumethiazide or chlorothiazide or chlorthalidone or cyclopenthiazide or hydrochlorothiazide or hydroflumethiazide or indapamide or methyclothiazide or metolazone or polythiazide or quinethazone or trichlormethiazide thiazide? or Aquatensen or Chlotride or Diucardin or Diulo or Diurese or Diuril or Enduron or Esidrix or Hydrodiuril or Hydromox or Hygroton or Lozol or Metahydrin or Microzide or Naqua or Naturetin or Oretic or Renese or Saluron or Thalitone or Zaroxolyn or Zide).tw.
64. or/61-63
65. exp Mineralocorticoid Receptor Antagonists/
66. ((mineralocorticoid or aldosterone) adj3 (antagonist? or block*)).tw.
67. (canrenoic acid or canrenone or eplerenone or finerenone or oxprenoate potassium or spironolactone or Aldactone or Contaren or Inspra or Luvion or Phanurane or Spiroletan).tw.
68. or/65-67
69. exp Antihypertensive Agents/
70. 39 or 44 or 48 or 52 or 56 or 60 or 64 or 68 or 69
71. randomized controlled trial.pt. or ("2x2" or "2 x 2" or "2 by 2" or "two by two" or "two x two" or factorial).tw.
72. 23 and 27 and 33 and 71
73. 23 and 27 and 70 and 71
74. 23 and 33 and 70 and 71
75. 23 and 27 and 33 and 70 and 71
76. 72 or 73 or 74 or 75
77. limit 76 to yr="1990 - 2015"

EMBASE (embase.com)

CMMI MITRE Trials--All 4b

No. Query Results

#75 #71 OR #72 OR #73 OR #74 596

#74 #23 AND #26 AND #31 AND #67 AND #68 AND #69 AND #70 164

#73 #23 AND #31 AND #67 AND #68 AND #69 AND #70 361

#72 #23 AND #26 AND #67 AND #68 AND #69 AND #70 350

#71 #23 AND #26 AND #31 AND #68 AND #69 AND #70 213

#70 'randomized controlled trial'/de OR 'factorial design'/exp OR '2x2':ab,ti OR '2 x 2':ab,ti OR '2 by 2':ab,ti OR 'two by two':ab,ti OR 'two x two':ab,ti OR factorial:ab,ti 399814

#69 [embase]/lim NOT [medline]/lim 6942976

#68 [1990-2015]/py 19657784

#67 #37 OR #42 OR #46 OR #50 OR #54 OR #58 OR #61 OR #65 OR #66 859048

#66 'antihypertensive agent'/exp 607862

#65 #62 OR #63 OR #64 34317

#64 'canrenoic acid':ab,ti OR canrenone:ab,ti OR eplerenone:ab,ti OR finerenone:ab,ti OR 'oxprenoate potassium':ab,ti OR spironolactone:ab,ti OR aldactone:ab,ti OR contaren:ab,ti OR inspra:ab,ti OR luvion:ab,ti OR phanurane:ab,ti OR spiroletan:ab,ti 8252

#63 ((mineralocorticoid OR aldosterone) NEAR/3 (antagonist* OR block*)):ab,ti 5055

#62 'mineralocorticoid antagonist'/exp 32621

#61 #59 OR #60 54682

#60 bendroflumethiazide:ab,ti OR chlorothiazide:ab,ti OR chlorthalidone:ab,ti OR cyclopenthiazide:ab,ti OR hydrochlorothiazide:ab,ti OR hydroflumethiazide:ab,ti OR indapamide:ab,ti OR methyclothiazide:ab,ti OR metolazone:ab,ti OR polythiazide:ab,ti OR quinethazone:ab,ti OR trichlormethiazide:ab,ti OR thiazide*:ab,ti OR aquatensen:ab,ti OR chlotride:ab,ti OR diucardin:ab,ti OR diulo:ab,ti OR diurese:ab,ti OR diuril:ab,ti OR enduron:ab,ti OR esidrix:ab,ti OR hydrodiuril:ab,ti OR hydromox:ab,ti OR hygroton:ab,ti OR lozol:ab,ti OR metahydrin:ab,ti OR microzide:ab,ti OR naqua:ab,ti OR naturetin:ab,ti OR oretic:ab,ti OR renese:ab,ti OR saluron:ab,ti OR thalitone:ab,ti OR zaroxolyn:ab,ti OR zide:ab,ti 18968

#59 'thiazide diuretic agent'/exp 51173

#58 #55 OR #56 OR #57 64481

#57 bumetanide:ab,ti OR ethacrynic:ab,ti AND acid:ab,ti OR furosemide:ab,ti OR mefruside:ab,ti OR muzolimine:ab,ti OR piretanide:ab,ti OR torsemide:ab,ti OR xipamide:ab,ti OR bumex:ab,ti OR edecrin:ab,ti OR lasix:ab,ti OR demadex:ab,ti 17539

#56 ((loop OR ceiling) NEAR/1 diuretic*):ab,ti 3329

#55 'loop diuretic agent'/exp 61888

#54 #51 OR #52 OR #53 266554

#53 acebutolol:ab,ti OR adimolol:ab,ti OR afurolol:ab,ti OR alprenolol:ab,ti OR amosulalol:ab,ti OR arotinolol:ab,ti OR atenolol:ab,ti OR befunolol:ab,ti OR betaxolol:ab,ti OR bevantolol:ab,ti OR bisoprolol:ab,ti OR bopindolol:ab,ti OR bornaprolol:ab,ti OR brefonalol:ab,ti OR bucindolol:ab,ti OR bucumolol:ab,ti OR bufetolol:ab,ti OR bufuralol:ab,ti OR bunitrolol:ab,ti OR bunolol:ab,ti OR bupranolol:ab,ti OR butofilolol:ab,ti OR butoxamine:ab,ti OR carazolol:ab,ti OR carteolol:ab,ti OR carvedilol:ab,ti OR celiprolol:ab,ti OR cetamolol:ab,ti OR chlortalidone:ab,ti AND cloranolol:ab,ti OR cyanoiodopindolol:ab,ti OR cyanopindolol:ab,ti OR deacetylmetipranolol:ab,ti OR diacetolol:ab,ti OR dihydroalprenolol:ab,ti OR dilevalol:ab,ti OR epanolol:ab,ti OR esmolol:ab,ti OR exaprolol:ab,ti OR falintolol:ab,ti OR flestolol:ab,ti OR flusoxolol:ab,ti OR hydroxybenzylpinodolol:ab,ti OR hydroxycarteolol:ab,ti OR hydroxymetoprolol:ab,ti OR indenolol:ab,ti OR iodocyanopindolol:ab,ti OR iodopindolol:ab,ti OR iprocrolol:ab,ti OR isoxaprolol:ab,ti OR labetalol:ab,ti OR landiolol:ab,ti OR levobunolol:ab,ti OR levomoprolol:ab,ti OR medroxalol:ab,ti OR mepindolol:ab,ti OR methylthiopropranolol:ab,ti OR metipranolol:ab,ti OR metoprolol:ab,ti OR moprolol:ab,ti OR nadolol:ab,ti OR nebivolol:ab,ti OR nifenalol:ab,ti OR nipradilol:ab,ti OR oxprenolol:ab,ti OR pafenolol:ab,ti OR pamatolol:ab,ti OR penbutolol:ab,ti OR pindolol:ab,ti OR practolol:ab,ti OR primidolol:ab,ti OR prizidilol:ab,ti OR procinolol:ab,ti OR pronetalol:ab,ti OR propranolol:ab,ti OR proxodolol:ab,ti OR ridazolol:ab,ti OR salcardolol:ab,ti OR soquinolol:ab,ti OR sotalol:ab,ti OR spirendolol:ab,ti OR talinolol:ab,ti OR tertatolol:ab,ti OR tienoxolol:ab,ti OR tilisolol:ab,ti OR timolol:ab,ti OR tolamolol:ab,ti OR toliprolol:ab,ti OR tribendilol:ab,ti OR xibenolol:ab,ti OR betapace:ab,ti OR blocadren:ab,ti OR bystolic:ab,ti OR cartrol:ab,ti OR coreg:ab,ti OR corgard:ab,ti OR inderal:ab,ti OR kerlone:ab,ti OR levatol:ab,ti OR lopressor:ab,ti OR normodyne:ab,ti OR sectral:ab,ti OR tenormin:ab,ti OR toprol:ab,ti OR trandate:ab,ti OR visken:ab,ti OR zebeta:ab,ti 65053

#52 (beta NEAR/2 (antagonist* OR block* OR receptor*)):ab,ti 44926

#51 'beta adrenergic receptor blocking agent'/exp 250279

#50 #47 OR #48 OR #49 132087

#49 alfuzosin:ab,ti OR bunazosin:ab,ti OR doxazosin:ab,ti OR prazosin:ab,ti OR silodosin:ab,ti OR tamsulosin:ab,ti OR terazosin:ab,ti OR trimazosin:ab,ti OR cardura:ab,ti OR hytrin:ab,ti OR minipress:ab,ti 15797

#48 (adrenergic NEAR/3 alpha NEAR/3 (antagonist* OR block* OR receptor*)):ab,ti 5107

#47 'alpha adrenergic receptor blocking agent'/exp 129341

#46 #43 OR #44 OR #45 208848

#45 amlodipine:ab,ti OR aranidipine:ab,ti OR azelnidipine:ab,ti OR barnidipine:ab,ti OR bencyclane:ab,ti OR benidipine:ab,ti OR bepridil:ab,ti OR cilnidipine:ab,ti OR cinnarizine:ab,ti OR clentiazem:ab,ti OR darodipine:ab,ti OR diltiazem:ab,ti OR efonidipine:ab,ti OR elgodipine:ab,ti OR etafenone:ab,ti OR fantofarone:ab,ti OR felodipine:ab,ti OR fendiline:ab,ti OR flunarizine:ab,ti OR gallopamil:ab,ti OR isradipine:ab,ti OR lacidipine:ab,ti OR lercanidipine:ab,ti OR lidoflazine:ab,ti OR lomerizine:ab,ti OR manidipine:ab,ti OR mibefradil:ab,ti OR nicardipine:ab,ti OR nifedipine:ab,ti OR niguldipine:ab,ti OR nilvadipine:ab,ti OR nimodipine:ab,ti OR nisoldipine:ab,ti OR nitrendipine:ab,ti OR perhexiline:ab,ti OR prenylamine:ab,ti OR semotiadil:ab,ti OR terodiline:ab,ti OR tiapamil:ab,ti OR verapamil:ab,ti OR adalat:ab,ti OR afeditab:ab,ti OR calan:ab,ti OR cardene:ab,ti OR cardizem:ab,ti OR cartia:ab,ti OR covera:ab,ti OR dilacor:ab,ti OR 'dilt-cd':ab,ti OR

diltzac:ab,ti OR dynacirc:ab,ti OR isoptin:ab,ti OR nifedical:ab,ti OR nifeditab:ab,ti OR norvasc:ab,ti OR plendil:ab,ti OR procardia:ab,ti OR sular:ab,ti OR taztia:ab,ti OR tiamate:ab,ti OR tiazac:ab,ti OR verelan:ab,ti 72768

#44 (calcium NEAR/2 (antagonist* OR block* OR inhibit*)):ab,ti 44775

#43 'calcium channel blocking agent'/exp 189819

#42 #38 OR #39 OR #40 OR #41 70699

#41 abitesartan:ab,ti OR azilsartan:ab,ti OR candesartan:ab,ti OR elisartan:ab,ti OR embusartan:ab,ti OR eprosartan:ab,ti OR fimasartan:ab,ti OR fonsartan:ab,ti OR forasartan:ab,ti OR irbesartan:ab,ti OR 'kt3-671':ab,ti OR losartan:ab,ti OR milfasartan:ab,ti OR olmesartan:ab,ti OR pomisartan:ab,ti OR pratosartan:ab,ti OR ripisartan:ab,ti OR saprisartan:ab,ti OR sparsentan:ab,ti OR tasosartan:ab,ti OR telmisartan:ab,ti OR valsartan:ab,ti OR zolasartan:ab,ti OR edarbi:ab,ti OR blopress:ab,ti OR atacand:ab,ti OR amias:ab,ti OR ratacand:ab,ti OR eprozar:ab,ti OR aprovel:ab,ti OR karvea:ab,ti OR avapro:ab,ti OR cozaar:ab,ti OR benicar:ab,ti OR olmecip:ab,ti OR micardis:ab,ti OR diovan:ab,ti 20528

#40 arb:ab,ti OR arbs:ab,ti 8505

#39 (angiotensin NEAR/3 receptor NEXT/1 (antagon* OR block*)):ab,ti 14889

#38 'angiotensin receptor antagonist'/exp 65818

#37 #32 OR #33 OR #34 OR #35 OR #36 177593

#36 alacepril:ab,ti OR altiopril:ab,ti OR ancovenin:ab,ti OR benazepril*:ab,ti OR captopril:ab,ti OR ceranapril:ab,ti OR ceronapril:ab,ti OR cilazapril:ab,ti OR deacetylalacepril:ab,ti OR delapril:ab,ti OR derapril:ab,ti OR enalapril*:ab,ti OR epicaptopril:ab,ti OR fasidotril*:ab,ti OR fosinopril:ab,ti OR foroxymithine:ab,ti OR gemopatrilat:ab,ti OR idrapril:ab,ti OR ilepatril:ab,ti OR imidapril*:ab,ti OR indolapril:ab,ti OR libenzapril:ab,ti OR lisinopril:ab,ti OR moexipril*:ab,ti OR omapatrilat:ab,ti OR pentopril*:ab,ti OR perindopril*:ab,ti OR pivopril:ab,ti OR quinapril*:ab,ti OR ramipril*:ab,ti OR rentiapril:ab,ti OR sampatrilat:ab,ti OR saralasin:ab,ti OR 's nitrosocaptopril':ab,ti OR spirapril*:ab,ti OR temocapril*:ab,ti OR teprotide:ab,ti OR trandolapril*:ab,ti OR utibapril*:ab,ti OR zabicipril*:ab,ti OR zofenopril*:ab,ti OR aceon:ab,ti OR accupril:ab,ti OR altace:ab,ti OR capoten:ab,ti OR lotensin:ab,ti OR mavik:ab,ti OR monopril:ab,ti OR prinivil:ab,ti OR univas:ab,ti OR vasotec:ab,ti OR zestril:ab,ti 32772

#35 acei:ab,ti 4854

#34 (ace NEAR/1 inhibit*):ab,ti 24293

#33 ((angiotensin* OR dipeptidyl* OR 'kininase ii') NEAR/3 (convert* OR enzyme OR inhibit* OR recept* OR block*)):ab,ti 65352

#32 'dipeptidyl carboxypeptidase inhibitor'/exp 142715

#31 #27 OR #28 OR #29 OR #30 112636

#30 atorvastatin:ab,ti OR lipitor:ab,ti OR cerivastatin:ab,ti OR baycol:ab,ti OR compactin:ab,ti OR fluvastatin:ab,ti OR fluindostatin:ab,ti OR lescol:ab,ti OR lovastatin:ab,ti OR mevacor:ab,ti OR mevinolin:ab,ti OR pitavastatin:ab,ti OR pitava:ab,ti OR livalo:ab,ti OR pravastatin:ab,ti OR pravachol:ab,ti OR lipostat:ab,ti OR rosuvastatin:ab,ti OR crestor:ab,ti OR simvastatin:ab,ti OR zocor:ab,ti 29114

#29 statin:ab,ti OR statins:ab,ti 39921

#28 (hmg NEXT/1 coa*):ab,ti 9363

#27 'hydroxymethylglutaryl coenzyme a reductase inhibitor'/exp 102633

#26 #24 OR #25 172724

#25 aspirin:ab,ti OR dispril:ab,ti OR polopiryna:ab,ti OR zorprin:ab,ti OR acetylsalicylic:ab,ti AND acid:ab,ti OR polopirin:ab,ti OR colfarit:ab,ti OR aloxiprimum:ab,ti OR micristin:ab,ti OR easprin:ab,ti OR magnecyl:ab,ti OR solprin:ab,ti OR ecotrin:ab,ti OR '2-(acetyloxy)benzoic acid':ab,ti OR endosprin:ab,ti OR acylpyrin:ab,ti OR solupsan:ab,ti OR acetysal:ab,ti 17541

#24 'acetylsalicylic acid'/de 170484

#23 #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 3866358

#22 hdl:ab,ti 72676

#21 ldl:ab,ti 81658

#20 hyperlipoprotein*emia*:ab,ti 5512

#19 hypertriglycerid*emia*:ab,ti 13464

#18 triglycerid*:ab,ti 116755

#17 hyperlip*emia*:ab,ti 39163

#16 hypercholester*emia*:ab,ti 34133

#15 cholesterol*:ab,ti 256170

#14 hypercholesterol*:ab,ti 38597

#13 hyperlipid*:ab,ti 35011

#12 'hyperlipidemia'/exp 123087

#11 ((blood OR diastolic OR systolic) NEAR/2 pressure*):ab,ti 366491

#10 hypertens*:ab,ti 494976

#9 stroke:ab,ti OR strokes:ab,ti 245313

#8 'cerebrovascular accident'/exp 227861

#7 infarct*:ab,ti 312247

#6 angina*:ab,ti 67931

#5 arteriosclerosis:ab,ti OR atherosclerosis:ab,ti 136361

#4 (coronary NEAR/2 disease*):ab,ti 161876

#3 (heart NEXT/1 disease*):ab,ti 183079

#2 (cardiovascular NEXT/1 disease*):ab,ti 151470

#1 'cardiovascular disease'/exp 3399341

Cochrane Library (CENTRAL, CDSR, DARE, HTA)

Search Name: CMMI MITRE Trials Complete 2

Last Saved: 07/07/2015 21:47:37.027

Description: 1990-2015

ID Search

#1 MeSH descriptor: [Cardiovascular Diseases] explode all trees
#2 (cardiovascular next/1 disease*):ab,ti
#3 (heart next/1 disease*):ab,ti
#4 (coronary near/2 disease*):ab,ti
#5 (arteriosclerosis or atherosclerosis):ab,ti
#6 angina*:ab,ti
#7 infarct*:ab,ti
#8 MeSH descriptor: [Stroke] explode all trees
#9 (stroke or strokes):ab,ti
#10 hypertens*:ab,ti
#11 ((blood or diastolic or systolic) near/2 pressure*):ab,ti
#12 MeSH descriptor: [Hyperlipidemias] explode all trees
#13 hyperlipid*:ab,ti
#14 hypercholesterol*:ab,ti
#15 cholesterol*:ab,ti
#16 hypercholester*emia*
#17 hyperlip*emia*:ab,ti
#18 triglycerid*:ab,ti
#19 hypertriglycerid*emia*:ab,ti
#20 hyperlipoprotein*emia*:ab,ti
#21 ldl:ab,ti
#22 hdl:ab,ti
#23 {or #1-#22}
#24 MeSH descriptor: [Aspirin] this term only
#25 (aspirin or dispril or polopiryna or zorprin or acetylsalicylic acid or polopirin or colfarit or aloxiprimum or micristin or easprin or magnecyl or solprin or ecotrin or '2- (acetyloxy) benzoic acid' or endosprin or acylpyrin or solupsan or acetysal):ab,ti
#26 #24 or #25
#27 MeSH descriptor: [Hydroxymethylglutaryl-CoA Reductase Inhibitors] explode all trees
#28 (hmg next/1 coa*):ab,ti
#29 statin:ab,ti or statins:ab,ti
#30 atorvastatin:ab,ti or lipitor:ab,ti or cerivastatin:ab,ti or baycol:ab,ti or compactin:ab,ti or fluvastatin:ab,ti or fluindostatin:ab,ti or lescol:ab,ti or lovastatin:ab,ti or mevacor:ab,ti or mevinolin:ab,ti or pitavastatin:ab,ti or pitava:ab,ti or livalo:ab,ti or pravastatin:ab,ti or pravachol:ab,ti or lipostat:ab,ti or rosuvastatin:ab,ti or crestor:ab,ti or simvastatin:ab,ti or zocor:ab,ti
#31 {or #27-#30}
#32 MeSH descriptor: [Hydroxymethylglutaryl-CoA Reductase Inhibitors] explode all trees
#33 ((angiotensin* or dipeptidyl* or "kininase ii") near/3 (convert* or enzyme or inhibit* or recept* or block*)):ab,ti
#34 (ace near/1 inhibit*):ab,ti
#35 acei:ab,ti
#36 alacepril:ab,ti or altiopril:ab,ti or ancovenin:ab,ti or benazepril*:ab,ti or captopril:ab,ti or ceranapril:ab,ti or ceronapril:ab,ti or cilazapril:ab,ti or deacetylalacepril:ab,ti or delapril:ab,ti or derapril:ab,ti or enalapril*:ab,ti or epicaptopril:ab,ti or fasidotril*:ab,ti or fosinopril:ab,ti or foroxymithine:ab,ti or gemopatrilat:ab,ti or idrapril:ab,ti or ilepatril:ab,ti or imidapril*:ab,ti or

indolapril:ab,ti or libenzapril:ab,ti or lisinopril:ab,ti or moexipril*:ab,ti or omapatrilat:ab,ti or pentopril*:ab,ti or perindopril*:ab,ti or pivopril:ab,ti or quinapril*:ab,ti or ramipril*:ab,ti or rentiapril:ab,ti or sampatrilat:ab,ti or saralasin:ab,ti or 's nitrosocaptopril':ab,ti or spirapril*:ab,ti or temocapril*:ab,ti or teprotide:ab,ti or trandolapril*:ab,ti or utibapril*:ab,ti or zabicipril*:ab,ti or zofenopril*:ab,ti or aceon:ab,ti or accupril:ab,ti or altace:ab,ti or capoten:ab,ti or lotensin:ab,ti or mavik:ab,ti or monopril:ab,ti or prinivil:ab,ti or univas:ab,ti or vasotec:ab,ti or zestril:ab,ti
#37 {or #32-#36}
#38 MeSH descriptor: [Angiotensin Receptor Antagonists] explode all trees
#39 (angiotensin near/3 receptor next/1 (antagon* or block*)):ab,ti
#40 arb:ab,ti or arbs:ab,ti
#41 abitesartan:ab,ti or azilsartan:ab,ti or candesartan:ab,ti or elisartan:ab,ti or embusartan:ab,ti or eprosartan:ab,ti or fimasartan:ab,ti or fonsartan:ab,ti or forasartan:ab,ti or irbesartan:ab,ti or 'kt3-671':ab,ti or losartan:ab,ti or milfasartan:ab,ti or olmesartan:ab,ti or pomisartan:ab,ti or pratosartan:ab,ti or ripisartan:ab,ti or saprisartan:ab,ti or sparsentan:ab,ti or tasosartan:ab,ti or telmisartan:ab,ti or valsartan:ab,ti or zolasartan:ab,ti or edarbi:ab,ti or blopress:ab,ti or atacand:ab,ti or amias:ab,ti or ratacand:ab,ti or eprozar:ab,ti or aprovel:ab,ti or karvea:ab,ti or avapro:ab,ti or cozaar:ab,ti or benicar:ab,ti or olmecip:ab,ti or micardis:ab,ti or diovan:ab,ti
#42 {or #38-#41}
#43 MeSH descriptor: [Calcium Channel Blockers] explode all trees
#44 (calcium near/2 (antagonist* or block* or inhibit*)):ab,ti
#45 amlodipine:ab,ti or aranidipine:ab,ti or azelnidipine:ab,ti or barnidipine:ab,ti or bencyclane:ab,ti or benidipine:ab,ti or bepridil:ab,ti or cilnidipine:ab,ti or cinnarizine:ab,ti or clentiazem:ab,ti or darodipine:ab,ti or diltiazem:ab,ti or efonidipine:ab,ti or elgodipine:ab,ti or etafenone:ab,ti or fantofarone:ab,ti or felodipine:ab,ti or fendiline:ab,ti or flunarizine:ab,ti or gallopamil:ab,ti or isradipine:ab,ti or lacidipine:ab,ti or lercanidipine:ab,ti or lidoflazine:ab,ti or lomerizine:ab,ti or manidipine:ab,ti or mibefradil:ab,ti or nicardipine:ab,ti or nifedipine:ab,ti or niguldipine:ab,ti or nilvadipine:ab,ti or nimodipine:ab,ti or nisoldipine:ab,ti or nitrendipine:ab,ti or perhexiline:ab,ti or prenylamine:ab,ti or semotiadil:ab,ti or terodiline:ab,ti or tiapamil:ab,ti or verapamil:ab,ti or adalat:ab,ti or afeditab:ab,ti or calan:ab,ti or cardene:ab,ti or cardizem:ab,ti or cartia:ab,ti or covera:ab,ti or dilacor:ab,ti or 'dilt-cd':ab,ti or diltzac:ab,ti or dynacirc:ab,ti or isoptin:ab,ti or nifedical:ab,ti or nifeditab:ab,ti or norvasc:ab,ti or plendil:ab,ti or procardia:ab,ti or sular:ab,ti or taztia:ab,ti or tiamate:ab,ti or tiazac:ab,ti or verelan:ab,ti
#46 {or #43-#45}
#47 MeSH descriptor: [Adrenergic alpha-Antagonists] explode all trees
#48 (adrenergic near/3 alpha near/3 (antagonist* or block* or receptor*)):ab,ti
#49 alfuzosin:ab,ti or bunazosin:ab,ti or doxazosin:ab,ti or prazosin:ab,ti or silodosin:ab,ti or tamsulosin:ab,ti or terazosin:ab,ti or trimazosin:ab,ti or cardura:ab,ti or hytrin:ab,ti or minipress:ab,ti
#50 {or #47-#49}
#51 MeSH descriptor: [Adrenergic beta-Antagonists] explode all trees
#52 (beta near/2 (antagonist* or block* or receptor*)):ab,ti
#53 acebutolol:ab,ti or adimolol:ab,ti or afurolol:ab,ti or alprenolol:ab,ti or amosulalol:ab,ti or arotinolol:ab,ti or atenolol:ab,ti or befunolol:ab,ti or betaxolol:ab,ti or bevantolol:ab,ti or bisoprolol:ab,ti or bopindolol:ab,ti or bornaprolol:ab,ti or brefonalol:ab,ti or bucindolol:ab,ti or bucumolol:ab,ti or bufetolol:ab,ti or bufuralol:ab,ti or bunitrolol:ab,ti or bunolol:ab,ti or bupranolol:ab,ti or butofilolol:ab,ti or butoxamine:ab,ti or carazolol:ab,ti or carteolol:ab,ti or carvedilol:ab,ti or celiprolol:ab,ti or cetamolol:ab,ti or chlortalidone:ab,ti and cloranolol:ab,ti or cyanoiodopindolol:ab,ti or cyanopindolol:ab,ti or deacetylmetipranolol:ab,ti or diacetolol:ab,ti or dihydroalprenolol:ab,ti or dilevalol:ab,ti or epanolol:ab,ti or esmolol:ab,ti or exaprolol:ab,ti or falintolol:ab,ti or flestolol:ab,ti or flusoxolol:ab,ti or hydroxybenzylpinodolol:ab,ti or hydroxycarteolol:ab,ti or hydroxymetoprolol:ab,ti or indenolol:ab,ti or iodocyanopindolol:ab,ti or iodopindolol:ab,ti or iprocrolol:ab,ti or isoxaprolol:ab,ti or labetalol:ab,ti or landiolol:ab,ti or levobunolol:ab,ti or levomoprolol:ab,ti or medroxalol:ab,ti or mepindolol:ab,ti or methylthiopropranolol:ab,ti or metipranolol:ab,ti or metoprolol:ab,ti or moprolol:ab,ti or nadolol:ab,ti or nebivolol:ab,ti or nifenalol:ab,ti or nipradilol:ab,ti or oxprenolol:ab,ti or pafenolol:ab,ti

or pamatolol:ab,ti or penbutolol:ab,ti or pindolol:ab,ti or practolol:ab,ti or primidolol:ab,ti or prizidilol:ab,ti or procinolol:ab,ti or pronetalol:ab,ti or propranolol:ab,ti or proxodolol:ab,ti or ridazolol:ab,ti or salcardolol:ab,ti or soquinolol:ab,ti or sotalol:ab,ti or spirendolol:ab,ti or talinolol:ab,ti or tertatolol:ab,ti or tienoxolol:ab,ti or tilisolol:ab,ti or timolol:ab,ti or tolamolol:ab,ti or toliprolol:ab,ti or tribendilol:ab,ti or xibenolol:ab,ti or betapace:ab,ti or blocadren:ab,ti or bystolic:ab,ti or cartrol:ab,ti or coreg:ab,ti or corgard:ab,ti or inderal:ab,ti or kerlone:ab,ti or levatol:ab,ti or lopressor:ab,ti or normodyne:ab,ti or sectral:ab,ti or tenormin:ab,ti or toprol:ab,ti or trandate:ab,ti or visken:ab,ti or zebeta:ab,ti
#54 {or #51-#53}
#55 MeSH descriptor: [Sodium Potassium Chloride Symporter Inhibitors] explode all trees
#56 ((loop or ceiling) near/1 diuretic*):ab,ti
#57 bumetanide:ab,ti or ethacrynic:ab,ti and acid:ab,ti or furosemide:ab,ti or mefruside:ab,ti or muzolimine:ab,ti or piretanide:ab,ti or torsemide:ab,ti or xipamide:ab,ti or bumex:ab,ti or edecrin:ab,ti or lasix:ab,ti or demadex:ab,ti
#58 {or #55-#57}
#59 MeSH descriptor: [Thiazides] explode all trees
#60 MeSH descriptor: [Sodium Chloride Symporter Inhibitors] explode all trees
#61 bendroflumethiazide:ab,ti or chlorothiazide:ab,ti or chlorthalidone:ab,ti or cyclopenthiazide:ab,ti or hydrochlorothiazide:ab,ti or hydroflumethiazide:ab,ti or indapamide:ab,ti or methyclothiazide:ab,ti or metolazone:ab,ti or polythiazide:ab,ti or quinethazone:ab,ti or trichlormethiazide:ab,ti or thiazide*:ab,ti or aquatensen:ab,ti or chlotride:ab,ti or diucardin:ab,ti or diulo:ab,ti or diurese:ab,ti or diuril:ab,ti or enduron:ab,ti or esidrix:ab,ti or hydrodiuril:ab,ti or hydromox:ab,ti or hygroton:ab,ti or lozol:ab,ti or metahydrin:ab,ti or microzide:ab,ti or naqua:ab,ti or naturetin:ab,ti or oretic:ab,ti or renese:ab,ti or saluron:ab,ti or thalitone:ab,ti or zaroxolyn:ab,ti or zide:ab,ti
#62 {or #59-#61}
#63 MeSH descriptor: [Mineralocorticoid Receptor Antagonists] explode all trees
#64 ((mineralocorticoid or aldosterone) near/3 (antagonist* or block*)):ab,ti
#65 "canrenoic acid":ab,ti or canrenone:ab,ti or eplerenone:ab,ti or finerenone:ab,ti or "oxprenoate potassium":ab,ti or spironolactone:ab,ti or aldactone:ab,ti or contaren:ab,ti or inspra:ab,ti or luvion:ab,ti or phanurane:ab,ti or spiroletan:ab,ti
#66 {or #63-#65}
#67 MeSH descriptor: [Antihypertensive Agents] explode all trees
#68 #37 or #42 or #46 or #50 or #54 or #58 or #62 or #66 or #67
#69 #23 and #26 and #31
#70 #23 and #26 and #68
#71 #23 and #31 and #68
#72 #23 and #26 and #31 and #68
#73 {or #69-#72} Publication Year from 1990 to 2015

Conference Proceedings Citation Index- Science (CPCI-S) --1990-present
Web of Science

#19 #18 OR #17 OR #16 OR #15

#18 #1 and #2 and #3 and #13 and #14

#17 #1 and #3 and #13 and #14

#16 #1 and #2 and #13 and #14

#15 #1 and #2 and #3 and #14

#14 TS=(random* or blind* or allocat* or assign* or trial* or placebo* or crossover* or cross-over* or group* or factorial)

#13 #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12

#12 TS=(antihypertensive NEAR/1 (agent$ or drug$ or medication$))

#11 TS=("Mineralocorticoid Receptor Antagonist$" or ((mineralocorticoid or aldosterone) NEAR/3 (antagonist? or block*)) or canrenoic acid or canrenone or eplerenone or finerenone or oxprenoate potassium or spironolactone or Aldactone or Contaren or Inspra or Luvion or Phanurane or Spiroletan)

#10 TS=("Sodium Chloride Symporter Inhibitor$" or bendroflumethiazide or chlorothiazide or chlorthalidone or cyclopenthiazide or hydrochlorothiazide or hydroflumethiazide or indapamide or methyclothiazide or metolazone or polythiazide or quinethazone or trichlormethiazide thiazide$ or Aquatensen or Chlotride or Diucardin or Diulo or Diurese or Diuril or Enduron or Esidrix or Hydrodiuril or Hydromox or Hygroton or Lozol or Metahydrin or Microzide or Naqua or Naturetin or Oretic or Renese or Saluron or Thalitone or Zaroxolyn or Zide)

#9 TS=("Sodium Potassium Chloride Symporter Inhibitor$" or ((loop or ceiling) NEAR/1 diuretic$) or bumetanide or ethacrynic acid or furosemide or mefruside or muzolimine or piretanide or torsemide or xipamide or Bumex or Edecrin or Lasix or Demadex)

#8 TS=((beta NEAR/2 (antagonist$ or block* or receptor$)) or acebutolol or adimolol or afurolol or alprenolol or amosulalol or arotinolol or atenolol or befunolol or betaxolol or bevantolol or bisoprolol or bopindolol or bornaprolol or brefonalol or bucindolol or bucumolol or bufetolol or bufuralol or bunitrolol or bunolol or bupranolol or butofilolol or butoxamine or carazolol or carteolol or carvedilol or celiprolol or cetamolol or chlortalidone cloranolol or cyanoiodopindolol or cyanopindolol or deacetylmetipranolol or diacetolol or dihydroalprenolol or dilevalol or epanolol or esmolol or exaprolol or falintolol or flestolol or flusoxolol or hydroxybenzylpinodolol or hydroxycarteolol or hydroxymetoprolol or indenolol or iodocyanopindolol or iodopindolol or iprocrolol or isoxaprolol or labetalol or landiolol or levobunolol or levomoprolol or medroxalol or mepindolol or methylthiopropranolol or metipranolol or metoprolol or moprolol or nadolol or oxprenolol or penbutolol or pindolol or nadolol or nebivolol or nifenalol or nipradilol or oxprenolol or pafenolol or pamatolol or penbutolol or pindolol or practolol or primidolol or prizidilol or procinolol or pronetalol or propranolol or proxodolol or ridazolol or salcardolol or soquinolol or sotalol or spirendolol or talinolol or tertatolol or tienoxolol or tilisolol or timolol or tolamolol or toliprolol or tribendilol or xibenolol or Betapace or Blocadren or Bystolic or Cartrol or Coreg or Corgard or Inderal or

Kerlone or Levatol or Lopressor or Normodyne or Sectral or Tenormin or Toprol or Trandate or Visken or Zebeta)

#7 TS=((adrenergic NEAR/3 alpha NEAR/3 (antagonist$ or block* or receptor$)) or alfuzosin or bunazosin or doxazosin or prazosin or silodosin or tamsulosin or terazosin or trimazosin or Cardura or Hytrin or Minipress)

#6 TS=((calcium NEAR/2 (antagonist? or block* or inhibit*)) or amlodipine or aranidipine or azelnidipine or barnidipine or bencyclane or benidipine or bepridil or cilnidipine or cinnarizine or clentiazem or darodipine or diltiazem or efonidipine or elgodipine or etafenone or fantofarone or felodipine or fendiline or flunarizine or gallopamil or isradipine or lacidipine or lercanidipine or lidoflazine or lomerizine or manidipine or mibefradil or nicardipine or nifedipine or niguldipine or nilvadipine or nimodipine or nisoldipine or nitrendipine or perhexiline or prenylamine or semotiadil or terodiline or tiapamil or verapamil or Adalat or Afeditab or Calan or Cardene or Cardizem or Cartia or Covera or Dilacor or "Dilt-CD" or Diltzac or DynaCirc or Isoptin or Nifedical or Nifeditab or Norvasc or Plendil or Procardia or Sular or Taztia or Tiamate or Tiazac or Verelan)

#5 TS=((angiotensin NEAR/3 ("receptor antagon*" or "receptor block*")) or arb$ or abitesartan or azilsartan or candesartan or elisartan or embusartan or eprosartan or fimasartan or fonsartan or forasartan or irbesartan or "KT3-671" or losartan or milfasartan or olmesartan or pomisartan or pratosartan or ripisartan or saprisartan or sparsentan or tasosartan or telmisartan or valsartan or zolasartan or Edarbi or Blopress or Atacand or Amias or Ratacand or Eprozar or Aprovel or Karvea or Avapro or Cozaar or Benicar or Olmecip or Micardis or Diovan)

#4 TS=(((angiotensin* or dipeptidyl* or "kininase ii") NEAR/3 (convert* or enzyme or inhibit* or recept* or block*)) or (ace NEAR/1 inhibit*) or acei or alacepril or altiopril or ancovenin or benazepril* or captopril or ceranapril or ceronapril or cilazapril or deacetylalacepril or delapril or derapril or enalapril* or epicaptopril or fasidotril* or fosinopril or foroxymithine or gemopatrilat or idrapril or ilepatril or imidapril* or indolapril or libenzapril or lisinopril or moexipril* or omapatrilat or pentopril* or perindopril* or pivopril or quinapril* or ramipril* or rentiapril or sampatrilat or saralasin or "s nitrosocaptopril" or spirapril* or temocapril* or teprotide or trandolapril* or utibapril* or zabicipril* or zofenopril* or Aceon or Accupril or Altace or Capoten or Lotensin or Mavik or Monopril or Prinivil or Univas or Vasotec or Zestril)

#3 TS=("Hydroxymethylglutaryl-CoA Reductase Inhibitor*" or hydroxymethylglutaryl* or "HMG-CoA*" or statin or statins or atorvastatin or lipitor or cerivastatin or baycol or compactin or fluvastatin or fluindostatin or lescol or lovastatin or mevacor or mevinolin or pitavastatin or pitava or livalo or pravastatin or pravachol or lipostat or rosuvastatin or crestor or simvastatin or zocor)

#2 TS=(aspirin or dispril or polopiryna or zorprin or acetylsalicylic acid or polopirin or colfarit or aloxiprimum or micristin or easprin or magnecyl or solprin or ecotrin or "2-(acetyloxy)benzoic acid" or endosprin or acylpyrin or solupsan or acetysal or ((acetylsalicylic or (acetyl NEAR/1 salicylic)) NEAR/1 acid*))

#1 TS=("cardiovascular disease*" or "heart disease*" or (coronary NEAR/2 disease*) or arteriosclerosis or atherosclerosis or angina* or infarct* or stroke or strokes or hypertens* or ((blood or diastolic or systolic) NEAR/2 pressure*) or hyperlipid* or hypercholesterol* or

cholesterol* or hypercholester*emia* or hyperlip*emia* or triglycerid* or hypertriglycerid$emia* or hyperlipoprotein$emia* or ldl or hdl)

Trials Register Searches

ClinicalTrials.gov
https://clinicaltrials.gov/

We ran three separate searches in ClinicalTrials.gov and combined the results.
536 total records retrieved
387 remained after deduplication and removing non-RCTs

Aspirin + Statins
(aspirin OR acetylsalicylic) AND (statin OR statins OR atorvastatin OR cerivastatin OR fluvastatin OR fluindostatin OR lovastatin OR pitavastatin OR pravastatin OR rosuvastatin OR simvastatin)

August 7, 2015--101 Records

Aspirin + Antihypertensives
(aspirin OR acetylsalicylic) AND ("blood pressure" OR hypertension OR hypertensive OR antihypertensive OR antihypertensives)

August 7, 2015--133 Records

Statins + Antihypertensives

(statin OR statins OR atorvastatin OR cerivastatin OR fluvastatin OR fluindostatin OR lovastatin OR pitavastatin OR pravastatin OR rosuvastatin OR simvastatin) AND ("blood pressure" OR hypertension OR hypertensive OR antihypertensive)

August 7, 2015--302 Records

WHO ICTRP
http://apps.who.int/trialsearch/Default.aspx

We ran three separate searches in the WHO ICTRP search portal and combined the results.
310 trial records retrieved.
202 remained after removing ClinicalTrials.gov records and non-RCTs.

Aspirin + Statins

aspirin AND statin OR aspirin AND statins OR aspirin AND atorvastatin OR aspirin AND cerivastatin OR aspirin AND fluvastatin OR aspirin AND fluindostatin OR aspirin AND lovastatin OR aspirin AND pitavastatin OR aspirin AND pravastatin OR aspirin AND rosuvastatin OR aspirin AND simvastatin OR acetylsalicylic AND statin OR acetylsalicylic AND statins OR acetylsalicylic AND atorvastatin OR acetylsalicylic AND cerivastatin OR acetylsalicylic AND fluvastatin OR acetylsalicylic AND fluindostatin OR acetylsalicylic AND lovastatin OR acetylsalicylic AND pitavastatin OR acetylsalicylic AND pravastatin OR acetylsalicylic AND rosuvastatin OR acetylsalicylic AND simvastatin

August 8, 2015--79 records for 72 trials

Aspirin + Antihypertensives

aspirin AND blood pressure OR aspirin AND hypertension OR aspirin AND hypertensive OR aspirin AND antihypertensive OR aspirin AND antihypertensives OR acetylsalicylic AND blood pressure OR acetylsalicylic AND hypertension OR acetylsalicylic AND hypertensive OR acetylsalicylic AND antihypertensive OR acetylsalicylic AND antihypertensives

August 8, 2015--82 records for 76 trials

Statins + Antihypertensives

statin AND blood pressure OR statin AND hypertension OR statin AND hypertensive OR statin AND antihypertensive OR statins AND blood pressure OR statins AND hypertension OR statins AND hypertensive OR statins AND antihypertensive OR atorvastatin AND blood pressure OR atorvastatin AND hypertension OR atorvastatin AND hypertensive OR atorvastatin AND antihypertensive OR cerivastatin AND blood pressure OR cerivastatin AND hypertension OR cerivastatin AND hypertensive OR cerivastatin AND antihypertensive OR fluvastatin AND blood pressure OR fluvastatin AND fluvastatin AND hypertension OR fluvastatin AND hypertensive OR fluvastatin AND antihypertensive OR lovastatin AND blood pressure OR lovastatin AND hypertension OR lovastatin AND hypertensive OR lovastatin AND antihypertensive OR pitavastatin AND blood pressure OR pitavastatin AND hypertension OR pitavastatin AND hypertensive OR pitavastatin AND antihypertensive OR pravastatin AND blood pressure OR pravastatin AND hypertension OR pravastatin AND hypertensive OR pravastatin AND antihypertensive OR rosuvastatin AND blood pressure OR

rosuvastatin AND hypertension OR rosuvastatin AND hypertensive OR rosuvastatin AND antihypertensive OR simvastatin AND blood pressure OR simvastatin AND hypertension OR simvastatin AND hypertensive OR simvastatin AND antihypertensive

August 8, 2015--186 records for 162 trials

eAppendix 2. Background, Methods, and Results of Systematic Review of Combination Drug Therapy to Evaluate for Potential Interaction of Effects

Background

Many individuals with increased risk for atherosclerotic cardiovascular disease (ASCVD) are likely to be eligible for multiple drugs for primary prevention according to the Million Hearts Initiative. Most clinicians assume that the effects of multiple treatments will be additive because many randomized clinical trials of aspirin, blood pressure-lowering therapies, statins, and tobacco-cessation drugs have included individuals who are on background drug therapy. However, the possibility of drug interactions exists. A "positive interaction" suggests that the effects of the preventive drugs are more than additive and would reduce event rates to a greater degree than predicted if the two individual drug effects were added. On the other hand, a "negative interaction" suggests that the effects of the preventive drugs are less than expected from simple addition. Therefore, to complement our overview estimating the effects of individual drug classes for primary ASCVD prevention, we sought to quantify the effects of concomitant preventive treatments.

Objective

To compare the efficacy and safety of combination treatment with aspirin, blood pressure lowering therapies, and statin (and all two-part combinations) on fatal and non-fatal outcomes for primary prevention of ASCVD, with the additive effects predicted from individual treatments.

Methods

The methods for this overview have been previously published as a protocol in PROSPERO (Registration no. CRD42015023444; available at http://www.crd.york.ac.uk/PROSPERO/display_record.asp?ID=CRD42015023444).

Types of studies

We included randomized controlled trials with a factorial design that compare combination treatments of aspirin, statin, or blood pressure lowering therapy for at least 12 months with treatment with one or more the individual components.

Types of participants

We included adults (18 years or older) without prevalent ASCVD, including individuals with diabetes mellitus. For trials that included a combination of individuals with and without prevalent ASCVD, we included trials where the proportion of individuals with prevalent ASCVD does not exceed 10%. Trials in which these drugs were used to treat or control chronic conditions (e.g., Alzheimer's disease, rheumatoid arthritis, renal disease, macular degeneration, aortic stenosis) were excluded.

Types of interventions

We compared the efficacy and safety of combination treatment of aspirin, statin, or blood pressure-lowering therapies against an active comparator including treatment from one included drug class. Possible combinations include:

- Aspirin + statin therapy
- Aspirin + blood pressure lowering therapy
- Statin + blood pressure lowering therapy
- Aspirin + statin + blood pressure lowering therapy

We did not include trials of fixed-dose combination therapy since a previous systematic review had identified that only one 12-week trial of fixed-dose combination therapy included active comparators, with all others comparing fixed-dose combination therapy to placebo or usual care.[1]

Types of outcomes

Primary

1. All-cause mortality
2. Fatal and non-fatal cardiovascular events, including myocardial infarction and stroke
3. Adverse events as reported by the study authors

Secondary

1. Fatal and non-fatal ischemic heart disease events, including myocardial infarction, angina, and revascularization
2. Fatal and non-fatal cerebrovascular events, including stroke and transient ischemic attack
3. Total nonfatal ASCVD events
4. Total and LDL cholesterol
5. Systolic and diastolic blood pressure
6. Health related quality of life using validated instruments
7. Cost

Search methods for identification of studies

Electronic searches

We searched the following sources:

- Cochrane Database of Systematic Reviews via the Cochrane Library—Wiley
- Database of Abstracts of Reviews of Effects (DARE) via the Cochrane Library—Wiley
- Health Technology Assessment Database (HTA) via the Cochrane Library—Wiley
- MEDLINE via Ovid
- EMBASE via embase.com
- Conference Proceedings Citation Index-Science (CPCI-S) on Web of Science (Thomson Reuters)
- Clinicaltrials.gov and the World Health Organization (WHO) International Clinical Trials Registry Platform (apps.who.int/trialsearch/)

We limited retrieval to trials published from 1990 to 2015. For MEDLINE, we used the McMaster single-term filter with the best balance of sensitivity and specificity for retrieving randomized controlled trials[2] and translated the same from Ovid to embase.com syntax for use in EMBASE. We limited the EMBASE retrieval to embase-only records and removed MEDLINE records ([embase]/lim NOT [medline]/lim). For Conference Proceedings Citation Index-Science we used a multi-term search filter for identifying trials. We did not apply any trials filters to the Cochrane Library search. Search strategies are included in e**Appendix 2**.

Searching other resources

We tried to identify other potentially eligible trials or ancillary publications by searching the reference lists of included trials. We contacted study authors of included trials when necessary to identify any further information that we may have missed.

Data collection and analysis

Selection of studies

Two review authors (KNK, MDH) independently scanned the abstract, title, or both, of retrieved records to determine which studies should be assessed further. We investigated all potentially relevant articles as full text. We resolved discrepancies through consensus or recourse to a third review author (DLJ). We present an adapted Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram showing the process of study selection for each intervention.

Data extraction

For studies that fulfilled the inclusion criteria, two review authors (KNK, MDH) independently abstracted key participant and intervention characteristics and reported data on pre-specified outcomes using standardized data extraction templates. We resolved discrepancies through consensus or recourse to a third review author (DLJ). We extracted the following study characteristics:

1. Methods: study design, country, time frame, target population
2. Participants: number, mean age, gender, comorbidities
3. Intervention
4. Outcomes: primary and secondary outcomes
5. Notes: funding for trial

In the event of duplicate publications, companion documents or multiple reports of a primary study, we maximized yield of information by collating all available data and using the most complete dataset aggregated across all known publications. In case of doubt, we gave priority to the publication reporting the longest follow-up associated with our primary or secondary outcomes.

Assessment of risk of bias

Two authors (KNK, MDH) independently assessed risk of bias for each study using the criteria outlined in the Cochrane Handbook for Systematic Reviews of Interventions.[3] We resolved any disagreements by discussion with a third author (DLJ). We assessed risk of bias using the Cochrane Collaboration's Risk of Bias tool. We assessed the following criteria:

- Random sequence generation (selection bias)
- Allocation concealment (selection bias)
- Blinding of participants and personnel (performance bias)
- Blinding of outcome assessment (detection bias)
- Incomplete outcome data (attrition bias)
- Selective reporting (reporting bias)
- Other potential sources of bias

We rated each potential source of bias as low, high, or unclear and evaluated individual bias items as described in the Cochrane Handbook for Systematic Reviews of Interventions. We assessed the effect of individual bias domains on study results at the endpoint and study levels. For performance bias (blinding of participants and personnel) and detection bias (blinding of outcome assessors), we evaluated the risk of bias separately for each outcome. We noted whether outcomes were measured subjectively or objectively. We considered the implications of missing outcome data from individual participants per outcome such as high dropout rates (e.g., above 15%) or disparate attrition rates (e.g., difference of 10% or more between study arms).

Measure of treatment effect

We expressed dichotomous data as odds ratios (ORs) or risk ratios (RRs) with 95% confidence intervals (CIs). We expressed continuous data as mean differences (MDs) with 95% CIs. We expressed time-to-event data as hazard ratios (HRs) with 95% CIs.

Dealing with missing data

We emailed study authors for missing data when necessary but did not receive responses to our data requests.

Data synthesis

We intended to undertake a meta-analysis for the included studies. However, due to markedly different study questions and interventions, we deemed that a pooled analysis would not be appropriate. Instead, we report individual trial results.

Evaluating the quality of evidence

Two authors (KNK, MDH) assessed the quality of the evidence using the GRADE approach. We rated the quality of evidence as: high, moderate, low, or very low after consideration of within-study risk of bias (methodological quality), directness of evidence, heterogeneity, precision of effect estimates, and risk of publication bias. We did not present results in a 'Summary of findings' table since we were unable to identify data for our primary outcomes.

Subgroup analyses

We did not perform any subgroup analyses.

Sensitivity analyses

We did not perform any sensitivity analyses.

Differences between protocol and review

None.

Results

The **Figure** describes the flow of retrieved, reviewed, and included studies for **combination therapy**. We retrieved 4,927 reports and reviewed 4,648 reports after excluding duplicates. We excluded 4,550 reports by screening the title and abstract and excluded 79 studies after full-text review. Two trials (ACCEPT-D [Current Controlled Trials: ISRCTN48110081] and HOPE-3 [clinicaltrials.gov: NCT00468923]) comparing concomitant drug therapy against individual drug therapies are currently ongoing.[4] We included results from 17 reports of 4 factorial randomized controlled clinical trials (BCAPS, HOT, PHYLLIS, and PREVEND-IT) that included a total of 21,358 participants.[5-42] The reasons for exclusion and references of excluded studies are reported in Appendices 3 and 4. The trials evaluated the following combinations:

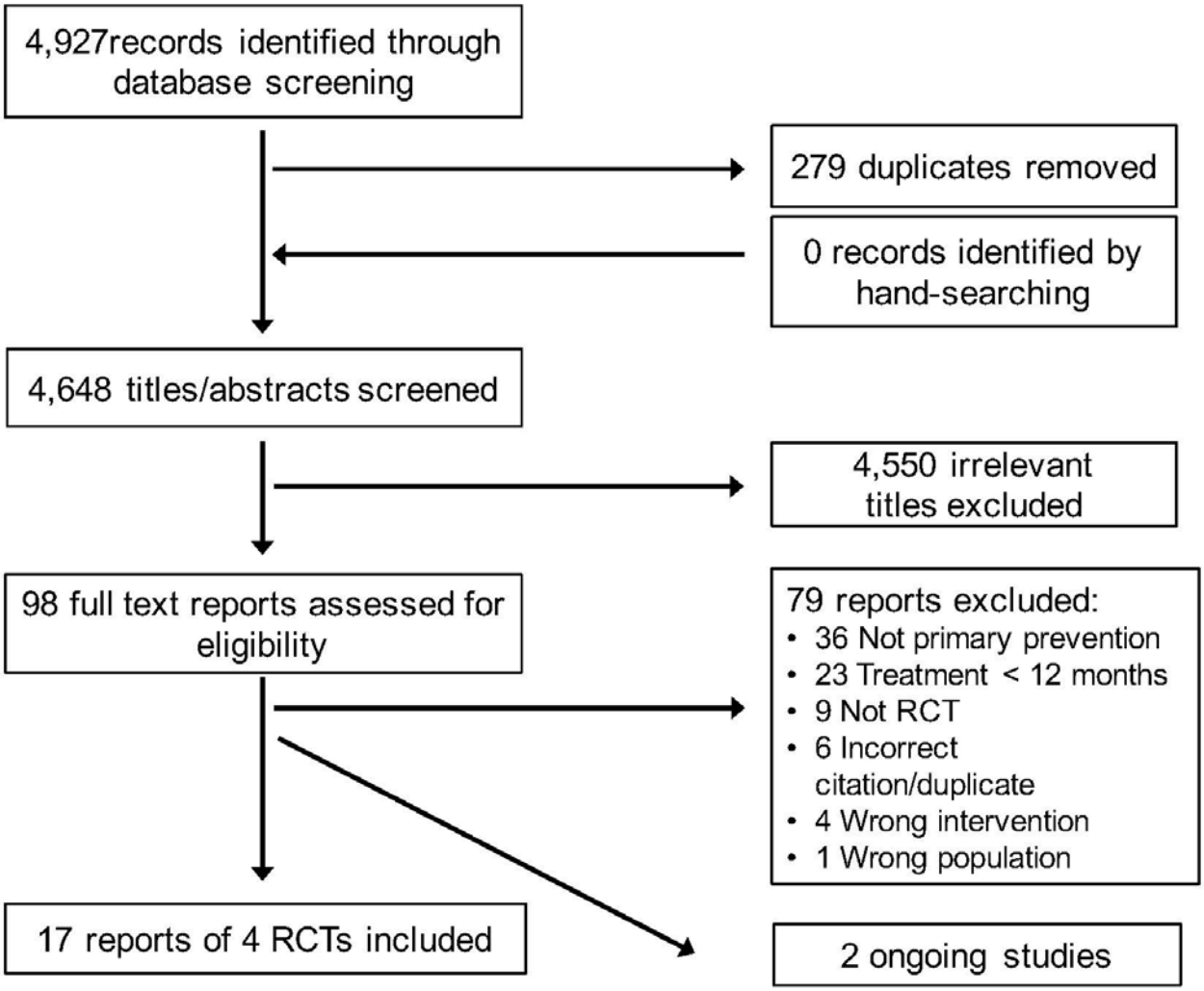
- Blood pressure-lowering therapy + aspirin vs. blood pressure-lowering therapy (HOT)[20]
- Blood pressure-lowering therapy + statin vs. blood pressure-lowering therapy (BCAPS, PHYLLIS, PREVEND-IT)[10,22,40]
- Blood pressure-lowering therapy + statin vs. statin (BCAPS, PREVEND IT)

The study characteristics and risk of bias for each study are outlined in the **Table**. The trials were undertaken in the 1990s, primarily among middle-aged European, white men with either cardiovascular risk factors or markers of preclinical atherosclerosis. Three of the 4 trials had a high risk of bias across at least one domain.

These trials were generally underpowered to detect differences in cardiovascular events between combination therapy and individual drug therapy, either due to small sample sizes or low event rates, and thus conclusions about possible interactions of combination drug therapy is limited. For example, the PREVEND IT reported major cardiovascular event rates for individuals randomized to fosinopril + pravastatin (3.7%) compared with fosinopril (4.2%) and pravastatin (6.0%) in its 2005 report.[10] There was substantial overlap in the relative risks of combination therapy compared with pravastatin alone (RR 0.46, 95%CI: 0.18 to 1.20) and fosinopril alone (RR 0.67, 95%CI: 0.24 to 1.85). A 2011 report of longer-term follow-up of PREVEND IT did not include data on events rates in the combination therapy arm.[13] Other primary outcomes were also not fully reported. In terms of secondary outcomes, the HOT trial reported no change in mean blood pressure between participants randomly allocated to blood pressure-lowering therapy + aspirin versus blood pressure-lowering therapy alone (mean BP 142.0/83.2 mmHg versus 141.4/82.9 mmHg).[20] Similar results for blood pressure were seen for the smaller BCAPS, PHYLLIS, and PREVEND IT studies, and no differences in lipids were seen in the combination or individual drug therapy groups in BCAPS or PREVEND IT.[13,22,32]

Overall, there does not appear to be evidence of any interaction effect of combination therapy for the primary prevention of ASCVD, but we rated the quality of evidence as low, downgrading because of study limitations and imprecision.

eFigure 1. PRISMA flowchart of systematic review of combination drug therapy for the primary prevention of ASCVD.



eTable 1. Characteristics of included and ongoing studies and risk of bias assessment.

BCAPS 2001 (n=793 participants): Study characteristics.

	Description
Population description	Men/women 49-70 years with plaque in right carotid artery but no symptoms of carotid artery disease Recruitment and screening from Malmo Diet and Cancer cohort
Inclusion criteria	Right carotid artery plaque but no symptoms of carotid artery disease (IMT >1.2 mm)
Exclusion criteria	History of myocardial infarction, angina pectoris, or stroke within the preceding 3 months; history of surgical intervention in right carotid artery; regular use of BB and statins; BP >160/95; TC >8.0 mmol/L; hyperglycemia suspected to require insulin; condition that investigator rendered unsuitable for trial
Description of intervention:	Metoprolol CR/XL 25 mg once daily + Fluvastatin 40 mg once daily Participants randomized to 1 of 4 drug combinations: placebo/placebo, metoprolol CR/XL (25 mg once daily)/placebo, fluvastatin (40 mg once daily)/ placebo, or metoprolol CR/XL (25 mg once daily)/fluvastatin (40 mg once daily).
Description of comparison:	Individual drug therapy as above + placebo
Age Mean (SD)	61.8 (5.3) years
Sex % women	 54.5%
Co-morbidities	3.2% NIDDM, 4.3% CVD

BCAPS 2001: Risk of bias assessment.

Domain	Risk of bias Low High Unclear	Support for judgement
Random sequence generation *(selection bias)*	☒ ☐ ☐	"Participants were randomly assigned to 1 of 4 drug combination groups according to a factorial design"
Allocation concealment *(selection bias)*	☐ ☐ ☒	Not reported
Blinding of participants and personnel *(performance bias)*	☐ ☐ ☒	Text implies participants were blinded but personnel were not
Blinding of outcome assessment *(detection bias)*	☐ ☐ ☒	"The End Point Committee, consisting of 2 independent scientists, validated all clinical end points at the end of the trial."
Incomplete outcome data *(attrition bias)*	☐ ☒ ☐	~20% treatment withdrawal
Selective outcome reporting? *(reporting bias)*	☐ ☐ ☒	Unclear if there were differences between the study reports and protocol.
Other bias	☐ ☒ ☐	This study was supported by grants from Astra-Zeneca Pharmaceuticals, Mölndal, Sweden. Member of endpoint committee received lecture fees from Astra-Zeneca

HOT 1998 (n=18,790 participants; n=9,399 participants in aspirin sub-study): Study characteristics.

	Description
Population description	Adults, age 50-80 years with HTN and DBP 100-115 mmHg
Inclusion criteria	Age 50-80 years Hypertension and DBP 100-115 mmHg
Exclusion criteria	None reported
Description of intervention:	Random assignment to BP target and ASA/placebo ASA + More intensive BP target - ≤ 85, ≤ 80; 5 steps 1. Felodipine 5 mg 2. Felodipine 5 mg + low dose BB or ACEi 3. Felodipine 10 mg + low dose BB or ACEi 4. Felodipine 10 mg + high dose BB or ACEi 5. Add diuretic
Description of comparison:	Placebo + above BP regimens
Age Mean (SD)	61.5 (7.5) years
Sex % women	47%
Co-morbidities	52% prior BP meds, 16% smokers, 6% prior CHD, 1% prior stroke, 8% DM

HOT 1998: Risk of bias assessment.

Domain	Risk of bias Low High Unclear	Support for judgement
Random sequence generation *(selection bias)*	☒ ☐ ☐	"The randomisation was computer-generated based on communications by fax between investigators and the Study Coordinating Centre at Östra Hospital, Göteborg, Sweden"
Allocation concealment *(selection bias)*	☒ ☐ ☐	
Blinding of participants and personnel *(performance bias)*	☐ ☒ ☐	Open label for DBP targets Double-blinded for aspirin – low risk of bias for this intervention Combination therapy: high risk of bias
Blinding of outcome assessment *(detection bias)*	☒ ☐ ☐	"An Independent Clinical Event Committee evaluated all events (masked)" Unclear for BP
Incomplete outcome data *(attrition bias)*	☒ ☐ ☐	2.6% lost to follow-up; no differences in baseline characteristics
Selective outcome reporting? *(reporting bias)*	☐ ☐ ☒	Unclear if there were differences between the study reports and protocol
Other bias	☐ ☐ ☒	Industry sponsored

PHYLLIS 2004 (n=508 participants): Study characteristics.

	Description
Population description	Men and postmenopausal women aged 45 to 70 years with untreated or uncontrolled hypertension, hypercholesterolemia, asymptomatic carotid atherosclerosis (maximum carotid IMT, Tmax, 1.3 to 4.0 mm), no previous cardiovascular events
Inclusion criteria	See above Uncontrolled BP = SBP 150-210 mmHg, DBP 95-115 mmHg Uncontrolled cholesterol = low-density lipoprotein (LDL) cholesterol 4.14-5.17 mmol/L (160 to 200 mg/dL), and triglycerides 3.39 mmol/L (300 mg/dL)
Exclusion criteria	Not reported in primary paper or protocol
Description of intervention:	Combination of fosinopril 20mg + pravastatin 40mg 2 x 2 factorial design. Individuals randomized to 1 of 4 treatment arms: (A) hydrochlorothiazide, 25 mg QD plus fosinopril placebo and pravastatin placebo; (B) fosinopril,20 mg QD plus hydrochlorothiazide placebo and pravastatin placebo; (C) hydrochlorothiazide, 25 mg QD, and pravastatin, 40 mg QD plus fosinopril placebo; (D) fosinopril, 20 mg QD, and pravastatin, 40 mg QD plus hydrochlorothiazide placebo.
Description of comparison:	Fosinopril 20mg daily
Age Mean (SD)	58.4 (6.7) years
Sex % women	60%
Co-morbidities	Not listed

PHYLLIS 2004: Risk of bias assessment.

Domain	Risk of bias Low High Unclear	Support for judgement
Random sequence generation *(selection bias)*	☒ ☐ ☐	"Randomization was computer generated with a block size of 4."
Allocation concealment *(selection bias)*	☐ ☐ ☒	"Each study treatment was placed in a numbered container"
Blinding of participants and personnel *(performance bias)*	☒ ☐ ☐	"Patients and study personnel were blinded to treatment assignment."
Blinding of outcome assessment *(detection bias)*	☒ ☐ ☐	"…core laboratory readers of carotid ultrasound or ambulatory blood pressure monitoring data) were blinded to treatment allocation."
Incomplete outcome data *(attrition bias)*	☐ ☒ ☐	ITT analysis but individuals lost to follow-up were excluded from analyses (~10%)
Selective outcome reporting? *(reporting bias)*	☐ ☐ ☒	Unclear if there were differences between the study reports and protocol
Other bias	☒ ☐ ☐	"Trial funded by pharmaceutical industry. 2 authors were employees of pharmaceutical company. Trial enrolment completed in 1997 but results first reported in 2004.

PREVEND IT 2004 (n= 864 participants): Study characteristics.

	Description
Population description	Aged 28-75 from PREVEND cohort in Netherlands
Inclusion criteria	Persistent microalbuminuria (a urinary albumin concentration 10 mg/L in 1 early morning spot urine sample and a concentration of 15 to 300 mg/24 hours in 2 24-hour urine samples at least once); untreated BP 160/100 mmHg; untreated total cholesterol 8.0 mmol/L or 5.0 mmol/L if prior MI
Exclusion criteria	Creatinine clearance 60% of the normal age-adjusted value; use of ACE inhibitors or angiotensin II receptor antagonists; liver enzyme elevation >3x upper limit of normal; use of insulin; documented allergy; pregnant/nursing
Description of intervention:	Combination of fosinopril 20 mg and pravastatin 40 mg
Description of comparison:	Individual drug therapy as above + placebo
Age Mean (SD)	51 (12) years
Sex % women	35%
Co-morbidities	3.5% prior CVD; 2.6% DM

PREVEND IT 2004: Risk of bias assessment.

Domain	Risk of bias Low	High	Unclear	Support for judgement
Random sequence generation *(selection bias)*	☒	☐	☐	"Randomization was performed in blocks of 20 based on a computer generated randomization list by the pharmacy of Academic Hospital Groningen, Groningen, the Netherlands."
Allocation concealment *(selection bias)*	☒	☐	☐	"…allocated to a treatment number"
Blinding of participants and personnel *(performance bias)*	☒	☐	☐	"The PREVEND IT is an investigator-initiated, single-center, double-blind, randomized, placebo-controlled trial…"
Blinding of outcome assessment *(detection bias)*	☒	☐	☐	"An independent end-point committee reviewed all end points. The members of this end-point committee had no knowledge of the subject's treatment assignment."
Incomplete outcome data *(attrition bias)*	☒	☐	☐	All analyses were performed on an intention-to-treat basis, loss to follow-up <6%
Selective outcome reporting? *(reporting bias)*	☐	☐	☒	Unclear if there were differences between the study reports and protocol.
Other bias	☐	☐	☒	Pharmaceutical funding

ACCEPT-D: Characteristics of ongoing study.

	Description
Trial name	ACCEPT-D
Methods	Open-label, parallel group RCT
Participants	Diabetic individuals without clinically manifest vascular disease
Description of intervention	Aspirin 100 mg daily + simvastatin 20 mg daily vs. simvastatin 20 mg daily
Outcomes	Cardiovascular death, MI, stroke, hospitalization for cardiovascular cause
Starting date	22 October 2007
Contact information	Dr. Antonio Nicolucci Department of Clinical Pharmacology and Epidemiology, Consorzio Mario Negri Sud, Via Nazionale, 8/a, S. Maria Imbaro, Italy, 66030
Notes	ISRCTN48110081

HOPE-3: Characteristics of ongoing study.

	Description
Trial name	HOPE-3
Methods	Randomized, placebo controlled, parallel group RCT
Participants	Adults 55 years or older with one abnormal cardiovascular disease risk factors
Description of intervention	Rosuvastatin 10mg + candesartan 16 mg/hydrochlorothiazide 12.5mg vs. individual components vs. placebo
Outcomes	Primary: LDL cholesterol, blood pressure, and combined risk factor changes Secondary: Total mortality, cardiovascular disease mortality, coronary heart disease events, cerebrovascular disease events, heart failure, revascularization, angina, progression of renal disease, diabetes
Starting date	May 2007
Contact information	Salim Yusuf Principal Investigator Population Health Research Institute McMaster University/Hamilton Health Sciences
Notes	NCT00468923

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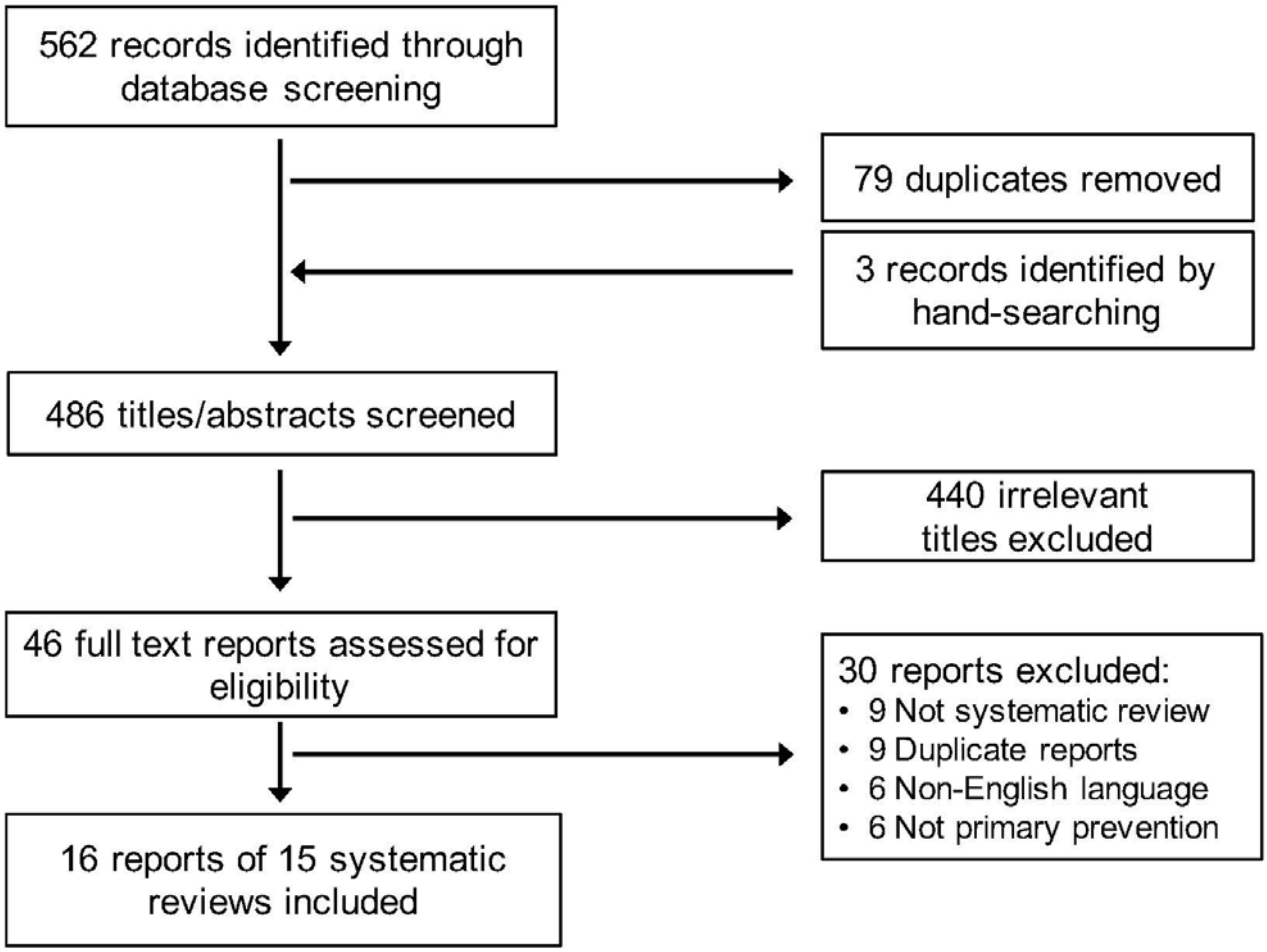
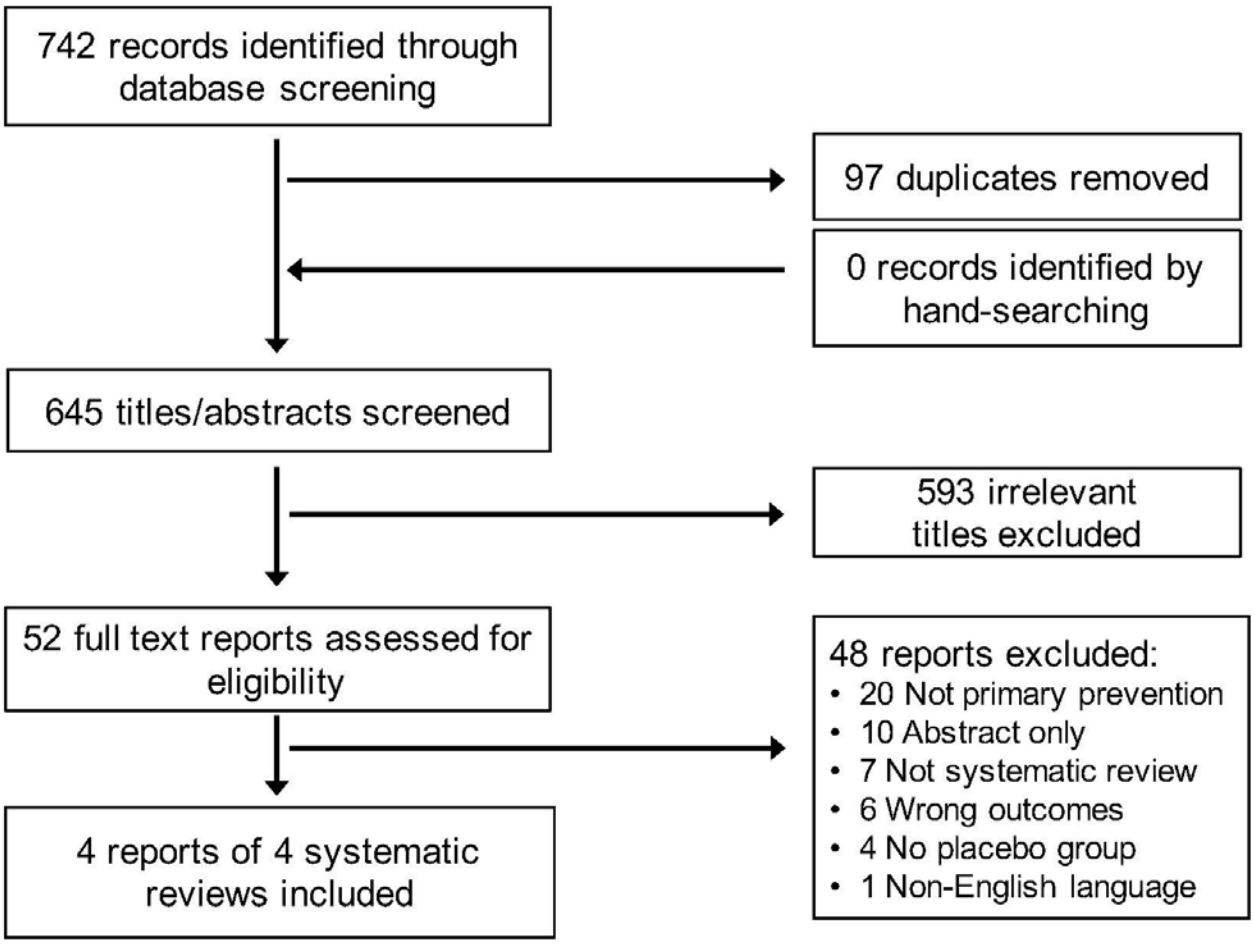
eAppendix 3. PRISMA Flow Charts for Each Drug Class and Detailed Systematic Review Characteristics

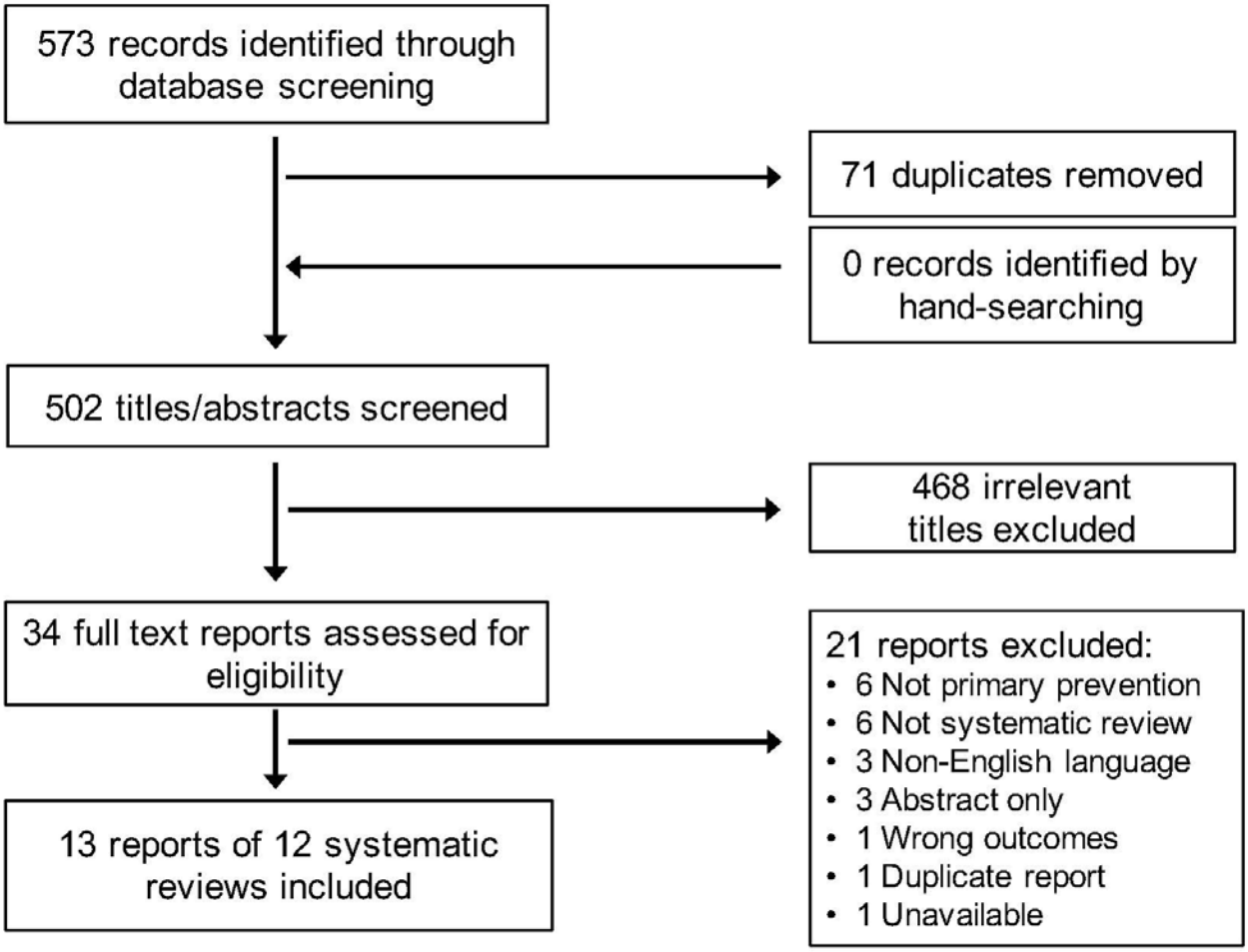
eFigure 2. PRISMA flowchart for overview of systematic review of aspirin for the primary prevention of ASCVD.



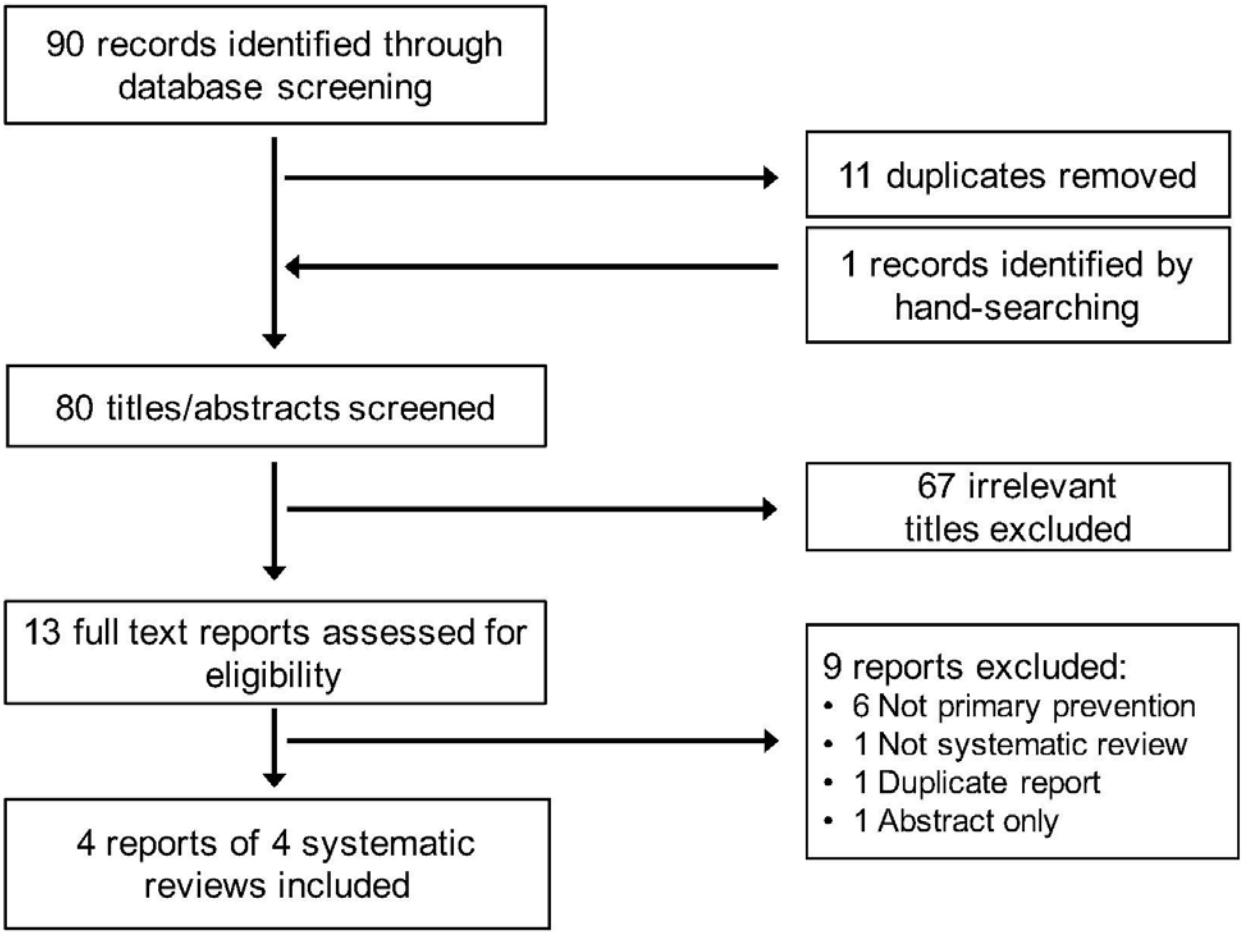
eFigure 3. PRISMA flowchart for overview of systematic review of blood pressure lowering therapies for the primary prevention of ASCVD.



eFigure 4. PRISMA flowchart for overview of systematic review of statins for the primary prevention of ASCVD.



eFigure 5. PRISMA flowchart for overview of systematic review of tobacco cessation drug therapies for the primary prevention of ASCVD.



eTable 1. Summary of included systematic reviews and meta-analyses for aspirin therapy in primary prevention

Author, year	Search time frame	Analysis	Outcomes	Trials (# participants)	Selected Effect Estimates for CVD EVENTS	Adverse Effects	Study level quality	AMSTAR
ATT 2009	Not reported	IPD meta-analysis	CVD, CHD, stroke, all-cause mortality, major extracranial bleeding	6 trials (95,500 participants, sic)	All-cause mortality, RR 0.95 (95% CI 0.88-1.02) Any serious vascular event, RR 0.88 (95% CI 0.82-0.94)	Major extracranial bleed, RR 1.54 (95% CI 1.30-1.82)	Not reported, IPD-meta-analysis of RCTs	5/11 IPD meta-analysis
Berger 2006	1966-2005	Study-level meta-analysis	CVD, all-cause mortality, major bleeding	6 trials (95,456 participants)	All-cause mortality, (women) OR 0.94 (95%CI 0.74-1.19) (men), OR 0.93 (95%CI 0.85-1.03) Major CVD events, (women), OR 0.88 (95% CI 0.79-0.99), (men), OR 0.86 (95% CI 0.78-0.94)	Major bleeding (women), OR 1.68 (95%CI 1.13-2.52) (men), OR 1.72 (95% CI 1.35-2.20)	Overall quality assessment for each study not provided. 6 studies included: 6 adequate selection bias; 4 adequate performance bias; 6 had blinded outcome assessment; 3 were industry funded	6/11
Berger 2011	2005-"present"	Study-level meta-analysis	CVD, CHD, stroke, all-cause mortality, CVD mortality, major bleeding	9 trials (102,621 participants)	All-cause mortality, RR 0.94 (95% CI 0.89-1.00, I^2=0%) Major CVD events, RR 0.90 (95%CI 0.85-0.96, I^2=0%)	Major bleeding, RR 1.62 (95% CI 1.31-2.00, I^2=35%)	Not reported	5/11
Brotons 2014	2008-2013	Overview of reviews	CVD events, bleeding events	10 trials included but data from only 9 listed (103,035 participants) 10 meta-analyses	N/A	N/A	Heterogeneity among meta-analyses and publication bias reported	6/11*

Author, year	Search time frame	Analysis	Outcomes	Trials (# participants)	Selected Effect Estimates for CVD EVENTS	Adverse Effects	Study level quality	AMSTAR
Raju 2011	1966-2010	Study-level meta-analysis	All-cause mortality, CVD mortality, MI, stroke, bleeding	9 trials (100,076 participants)	All-cause mortality, RR 0.94 (95% CI 0.88-1.00, I^2=0%) Major CVD events, RR 0.88 (95% CI 0.83-0.94, I^2=0%)	Major bleeding, RR 1.66 (95% CI 1.41-1.95, I^2=0%)	Cochrane Risk of Bias tool for each trial: 6/9 low risk selection bias; 6/9 low risk performance bias; 7/9 with low-risk attrition bias; 9/9 used intention to treat analysis; 3/9 stopped early	10/11
Raju 2012	2007-2012	Overview of reviews	All-cause mortality, CVD mortality, CVD evens, MI, stroke, bleeding	4 meta-analyses, 95,000-102,621 participants	All-cause mortality, RR 0.94 (95% CI 0.88-1.00) to RR 0.95 (95% CI 0.88-1.02) Major CVD events, RR 0.87 (95% CI 0.80-0.93) to RR 0.90 (95% CI 0.85-0.96)	Major bleeding, RR 1.31 (95% CI 1.14-1.50) to 1.66 (95% CI 1.41-1.95)	No formal quality assessment of meta-analyses	2/11*
Seshasai 2012	Inception - 2011	Study-level meta-analysis	Total CHD, total cancer mortality, CVD events, all-cause mortality, nontrivial bleeding	9 trials (102,621 participants)	All-cause mortality, OR 0.94 (95%CI 0.88-1.00, I^2=0%) Total CVD events, OR 0.90 (95%CI 0.85-0.96, I^2=0%)	Total bleeding, OR 1.70 (95%CI 1.17-2.46 I^2 =98%) Non-trivial bleeding, OR 1.31 (95%CI 1.14-1.50, I^2=66%)	Assessed via Delphi process; *"9 good quality"* studies, scores ranged from 16 to 18	10/11
Sutcliffe 2013	2008-2012	Study-level meta-analysis	All-cause mortality, CVD events, total CHD events, gastrointestinal bleeding, major bleeding, hemorrhagic stroke	9 trials (102,621 participants)	All-cause mortality, RR 0.94 (95% CI 0.88-1.00) Major CVD events, RR 0.90 (95% CI 0.85-0.96)	Major bleeding, RR 1.54 (95% CI 1.30-1.82) and 1.62 (95% CI 1.31-2.00)	Cochrane risk of bias tool: 3 trials assessed as low risk of bias across all domains, other RCTs not assessed	11/11
Wolff 2009	2001-2008	Qualitative	MI, stroke, CVD mortality, all-cause mortality, gastrointestinal bleeding, serious bleeding, cerebral hemorrhage	6 trials (95,456 participants)	Major CVD events, (women), OR 0.88 (95% CI 0.79-0.99); (men), OR 0.86 (95% CI 0.78-0.94)	Major bleeding, (women) OR 1.68 (95% CI 1.13-2.52) (men) OR 1.72 (95% CI 1.35-2.20)	USPSTF Study quality criteria used 1 "good quality" meta-analysis; 4 "good quality" RCTs and 2 "fair quality."	8/11

Author, year	Search time frame	Analysis	Outcomes	Trials (# participants)	Selected Effect Estimates for CVD EVENTS	Adverse Effects	Study level quality	AMSTAR
Aspirin – Diabetes-specific treatment effects								
Butalia 2011	1950-2011	Study-level meta-analysis	CVD events, hemorrhage, gastrointestinal bleeding,	7 trials (11,618 participants)	All-cause mortality, RR 0.95 (95% CI 0.85-1.06, I^2 =0%) Major adverse CVD events, RR 0.91 (95% CI 0.82-1.00, I^2 =0%)	Hemorrhagic complications, RR 2.50 (95% CI 0.77-8.10)	Jadad scores reported (range 3-5); 7/7 randomized; 5/7 blinded; 4/7 ITT; 6/7 accounted for lost to follow up	9/11
Calvin 2009	Inception - 2008	Study-level meta-analysis	Ischemic stroke, MI, all-cause mortality	8 trials (89,392 participants/11,634 diabetics)	All-cause mortality Diabetics RR 1.02 (95%CI 0.85- 1.21, I^2=0%) Nondiabetics RR 0.87 (95%CI 0.75-1.02, I^2=0%) No interaction between presence or absence of diabetes	Not reported	Assessed as "high" methodological quality based on specific judgments of the risk of bias domains	10/11
De Berardis 2009	1966-2008	Study-level meta-analysis	All-cause mortality, CVD death, fatal or nonfatal CVD events, any bleeding, gastrointestinal bleeding, cancer	6 trials (10,117 participants)	All-cause mortality, RR 0.93 (95% CI 0.82-1.05, I^2 =0%) Major CVD events, RR 0.90 (95% CI 0.81-1.00, I^2 =0%)	Any bleeding, RR 2.50 (95% CI 0.76-8.21)	Assessed as *"suboptimal"* based on specific judgments of the risk of bias domains	8/11
Stavrakis 2011	Inception - 2009	Study-level meta-analysis	Total mortality, CVD mortality, MI, stroke	7 trials reported but data from only 5 trials (7,384 participants) included	All-cause mortality, HR 0.99 (95%CI 0.82-1.20) Major CVD events, HR 0.89 (95% 0.70-1.13)	Major bleeding, RR 3.02 (95%CI 0.48-18.86, I^2=66%)	*"High"* quality evidence Jadad score: 5 (3 RCTs); 4 (2 RCTs)	7/11
Younis 2010	Inception-2009	Study-level meta-analysis	CVD events, MI, stroke, all-cause mortality	6 trials (9,418 participants)	All-cause mortality, RR 0.96 (95% CI 0.78-1.18) Major CVD events, RR 0.90 (95% CI 0.78-1.05)	Major bleeding, RR 2.49 (95% CI 0.70-8.84)	No risk of bias assessment performed for included RCTs	5/11
Zhang 2010	1950-2009	Study level meta-analysis	CVD events, all-cause mortality, CVD mortality, MI, stroke, major bleeding	7 trials (11,618 participants)	All-cause mortality, RR 0.95 (95% CI 0.85-1.06, I^2=0%)	Major bleeding, RR 2.46 (95% CI 0.70- 8.61, I^2=85%)	No risk of bias assessment performed of included RCTs	5/11

					Major CVD events, RR 0.92 (95% CI 0.83-1.02, I^2=0%)			

* Denotes overview of systematic reviews
Abbreviations: IPD = individual participant data, CVD = cardiovascular disease, CHD = coronary heart disease, MI = myocardial infarction

eTable 2. Summary of included systematic reviews and meta-analyses for blood pressure-lowering therapy in primary prevention

Author, year	Search time frame	Analysis	Outcomes	Trials (# participants)	Selected Effect Estimates for CVD EVENTS	Adverse Effects	Study level quality	AMSTAR
Diao 2012	Inception – 2013	IPD meta-analysis	All-cause mortality, CVD events, stroke, CHD, withdrawals due to adverse drug effects	4 trials (8,912 participants); individual participant data obtained for 3 trials (7,900 participants)	All-cause mortality, RR 0.85 (95% CI 0.63-1.15, I^2=22%) Total CVD events, RR 0.97 (95% CI 0.72-1.32, I^2=0%)	Withdrawals due to adverse events, RR 4.80 (95% CI 4.14-5.57) *from 1 RCT only	*"Very low"* quality of evidence according to GRADE for total mortality and cardiovascular events; "moderate" quality for withdrawals	8/11
Fretheim 2012	Inception – 2011	Study-level meta-analysis	All-cause mortality, MI, stroke, angina, heart failure, diabetes mellitus	25 trials (164,131 participants)	All-cause mortality Diuretics vs. placebo, RR 0.88 (95% CI 0.80-0.95) Beta blockers vs. placebo, RR 0.97 (95% CI 0.86-1.10) ACE-I vs. placebo, RR 0.87 (95% CI 0.79-0.96) Calcium channel blocker vs. placebo, RR 0.85 (95% CI 0.78-0.93) Alpha blocker vs. placebo, RR 0.89 (95% CI 0.77-1.18) ARB vs. placebo, RR 0.85 (95% CI 0.76-0.96)	Not reported	Primary outcomes: High quality for CCBs, diuretics and moderate quality for ACE-I, ARBs, beta blockers, alpha blockers	9/11

Author, year	Search time frame	Analysis	Outcomes	Trials (# participants)	Selected Effect Estimates for CVD EVENTS	Adverse Effects	Study level quality	AMSTAR
Law 2009	1966 – 2007	Study-level meta-analysis	Fatal and nonfatal CHD, fatal and nonfatal stroke, heart failure events, all-cause mortality	147 total trials (464,164 participants) 27 trials (108,297 participants) in those with no vascular disease	All-cause mortality, RR 0.89 (95% CI 0.84-0.95) Composite CVD outcomes not reported Coronary heart disease events, RR 0.84 (95% CI 0.79-0.90) Stroke events, RR 0.64 (95% CI 0.56-0.73) RR standardized to 10/5mmHg blood pressure lowering effect Coronary heart disease events, RR 0.79 (95% CI 0.72-0.86) Stroke events, RR 0.54 (95% CI 0.45-0.65)	Not reported	Not reported	4/11
Sundström, 2015	Included Diao 2012 Updated search 2011 – 2014	IPD meta-analysis	CVD events, MI, stroke, heart failure, CVD mortality, all-cause mortality	13 trials total (15,266 participants) Non-BPLTTC Trials 3 RCTs (8,905 participants) BPLTTC Trials 10 RCTs (6,361 participants)	All-cause mortality, OR 0.78 (95% CI 0.67-0.92, I^2=17%) Total cardiovascular events, OR 0.86 (95% CI 0.74-1.01, I^2=3%)	Quantitative synthesis not reported Withdrawals were equally common in active and control groups in the BPLTTC trials	"Risk of bias within trials was judged as low overall."	7/11

* Denotes overview of systematic reviews
Abbreviations: IPD = individual participant data, CVD = cardiovascular disease, CHD = coronary heart disease, MI = myocardial infarction

eTable 3. Summary of included systematic reviews and meta-analyses for statins in primary prevention

Author, year	Search time frame	Analysis	Outcomes	Trials (# participants)	Selected Effect Estimates for CVD Events	Adverse Effects	Study level quality	AMSTAR
Brugts 2009	1990-2008	Study-level meta-analysis	All-cause mortality, CHD events, stroke events, CHD death, nonfatal MI, coronary revascularizations, cancer	10 trials (70,388 participants)	All-cause mortality, OR 0.88 (95% CI 0.81-0.96, I^2=27%) Major CHD events, OR 0.70 (95% CI 0.61-0.81, I^2=60%) Major stroke events, OR 0.81 (95% CI 0.71-0.93, I^2=24%)	Fatal or nonfatal cancer, OR 0.97 (95% CI 0.89-1.05)	Only studies with Jadad score ≥4 were included	9/11
Bukkapatnam 2010	1985-2009	Study-level meta-analysis	All-cause mortality, CHD-related mortality, CVD events, cancer incidence	6 trials (21,963 women)	All-cause mortality, RR 0.90 (95% CI 0.60-1.35) CHD events, RR 0.78 (95% CI 0.64-0.96)	Cancer incidence, RR 0.83 (95% CI 0.41-1.69)	Not reported	7/11
CTT 2012	Data from 1994-2009	IPD meta-analysis	Major vascular events, Major coronary events, coronary revascularization, stroke, site-specific cancers, cause-specific mortality	22 trials of statin vs. control 5 year risk of major vascular events <5% (24,790 participants, 96% without a history of CVD) 5-year risk of major vascular events 5-<10% (28,362 participants, 87% without a history of CVD)	All-cause mortality, RR 0.91 (95% CI 0.85- 0.97) Major CVD events, RR 0.75 (95% CI 0.70-0.80) per 1 mmol/L reduction in LDL cholesterol	Cancer incidence, RR 1.05 (95% CI 0.85-1.31) and RR 0.91 (95% CI 0.78-1.05) per 1 mmol/L reduction in LDL cholesterol	Not reported but prospective IPD meta-analysis	7/11 *IPD meta-analysis
CTT 2015	Data from 1994-2010	IPD meta-analysis	Major vascular events, major coronary events, coronary revascularization, stroke, site-specific cancers, cause-specific mortality	13 trials of statin vs. control (70,025 participants without CVD)	Major vascular events, (overall) RR 0.75 (95% CI 0.71-0.80) (men) RR 0.72 (99%CI 0.66-0.80) (women) RR 0.85 (99% CI 0.72-1.00) per 1 mmol/L reduction in LDL cholesterol	Cancer incidence, (overall) RR 1.00 (95% CI 0.96-1.04) (men) RR 0.98 (99% CI 0.93-1.04) (women) RR 1.08 (99% CI 0.95-1.21) per 1 mmol/L reduction in LDL cholesterol	Not reported but prospective IPD meta-analysis.	7/11 *IPD meta-analysis

Author, year	Search time frame	Analysis	Outcomes	Trials (# participants)	Selected Effect Estimates for CVD Events	Adverse Effects	Study level quality	AMSTAR
Mills 2008	Inception-2008	Study-level meta-analysis	All-cause mortality, CVD mortality, fatal and nonfatal MI, major coronary events	20 trials (63,899 participants)	All-cause mortality, RR 0.93 (95% CI 0.87-0.99) Major CVD events, RR 0.85 (95%CI 0.77-0.95 I^2=61%)	Cancer, RR 1.02 (95% CI 0.94-1.11) Rhabdomyolysis, RR 0.97 (95% CI 0.25-3.83)	All studies had low risk of performance bias; allocation concealment was reported inconsistently (10/20 trials)	8/11
Petretta 2010	2002-2008	Study-level meta-analysis	All-cause mortality, CHD mortality, nonfatal MI, CHD events, coronary revascularization	8 trials (65,849 participants)	All-cause mortality, men RR 0.93 (95% CI 0.83-1.04, I^2=0%); women RR 0.96 (95% CI 0.81-1.13, I^2=34%) CHD events, men RR 0.59 (95% CI 0.48-0.74, I^2=89%); women RR 0.89 (95%CI 0.79-1.00, I^2=17.9%)	Not reported	Jadad scores reported, range from 2 to 5	8/11
Ray 2010	1970-2009	Study-level meta-analysis	All-cause mortality	11 trials (65,229 participants)	All-cause mortality, RR 0.91 (95% CI 0.83-1.01, I^2=23%)	Not reported	Not reported	8/11
Taylor 2013	Inception-2012	Study-level meta-analysis	All-cause mortality, fatal and non-fatal CHD, fatal and non-fatal stroke events, CVD events, coronary revascularization, quality of life, costs, change in cholesterol, adverse events	18 trials (56,934 participants)	All-cause mortality, OR 0.86 (95%CI 0.79-0.94) Total CVD events, RR 0.75 (95%CI 0.70-0.81)	Adverse events, RR 1.00 (95% CI 0.97-1.03) Cancer, RR 1.01 (95% CI 0.93-1.10) Myalgia and rhabdomyolysis, RR 1.03 (95% CI 0.23-4.38) Type 2 diabetes, RR 1.18 (95% CI 1.01-1.39)	*"In general, there was low risk of bias though all trials were either fully or partially funded by pharmaceutical companies"*	11/11
Thavendiranathan 2006	Inception-2005	Study-level meta-analysis	Major CHD events, major cerebrovascular events, all-cause mortality, CHD death, nonfatal MI, coronary revascularizations Adverse outcomes (CK and/or liver enzyme elevation), fatal or nonfatal cancer	7 trials (42,848 participants)	All-cause mortality, RR 0.92 (95% CI 0.84-1.01) Major CHD events, RR 0.71 (95% CI 0.60-0.83)	Fatal or nonfatal cancer, RR 1.01 (95% CI 0.92-1.13) CK elevation, RR 0.51 (95% CI 0.16-1.60) Liver enzyme elevation, RR 1.37 (95% CI 0.90-2.09)	JADAD scale, score of ≥3 considered to reflect a trial of high quality *"All studies were of high methodologic quality"*	8/11

Author, year	Search time frame	Analysis	Outcomes	Trials (# participants)	Selected Effect Estimates for CVD Events	Adverse Effects	Study level quality	AMSTAR
Statins – diabetes specific treatment effects								
Chen 2012	1990-2011	Study-level meta-analysis	Major adverse cardiovascular and cerebrovascular events (MACCE), CHD, coronary revascularization, angina pectoris, and fatal or non-fatal stroke All-cause mortality	7 trials (12,711 participants)	All-cause mortality, OR 0.79 (95% CI 0.58-1.08, I^2=30%) Major CVD events, OR 0.79 (95% CI 0.66-0.95, I^2=56%)	Not reported	Not reported	5/11
Costa 2006	1966-2004	Study-level meta-analysis	Major coronary events, CAD, nonfatal MI, CAD death, coronary revascularization, stroke, change in cholesterol	6 trials reporting primary prevention but only 5 statin primary prevention trials (53,605 participants); WOSCOPS and BIP excluded because no data on participants with diabetes were included.	Major coronary events, (diabetes) RR 0.80 (95% CI 0.71-0.90, I^2=23%) (no diabetes) RR 0.77 (95% CI 0.66-0.91, I^2=64%)	Not reported	JADAD score used to assess study quality, 4 out of 5 primary prevention statin trials with JADAD score of 5, 1 trial (ALLHAT-LLT) with JADAD score=3	8/11
deVries 2012	1966-2011	Study-level meta-analysis	Major cardiovascular and cerebrovascular events, nonfatal and fatal MI, nonfatal and fatal stroke, all-cause mortality	4 trials (10,187 participants)	All-cause mortality, RR 0.84 (95% CI 0.65-1.09, I^2=46%) Major CVD events, RR 0.75 (95% CI 0.67-0.85, I^2=46%)	Not reported	Included studies had Jadad scores $\geq$4	8/11

* Denotes overview of systematic reviews

Abbreviations: IPD = individual participant data, CVD = cardiovascular disease, CHD = coronary heart disease, MI = myocardial infarction

eTable 4. Summary of included systematic reviews and meta-analyses for tobacco cessation drugs in primary prevention

Author, year	Search time frame	Analysis	Outcomes	Trials (# participants)	Selected Effect Estimates	Adverse Effects	Study level quality	AMSTAR
Ontario HTAC 2010	2000-2008	Overview of reviews	Continuous smoking cessation at 6 months, adverse events, cost-effectiveness ratio	NRT 111 trials (43,040 participants) Bupropion 31 trials (9,940 participants) Varenicline 9 trials (4,138 participants)	CVD events: Not reported Smoking cessation at 6 months: NRT, RR 1.58 (95% CI 1.50-1.66) Bupropion, RR 1.75 (85% CI 1.58-1.94) Varenicline, RR 2.33 (95% CI 1.95-2.80)	No quantitative synthesis of adverse events	NRT – method of randomization and allocation concealment were poorly described but all trials performed biochemical validation of smoking cessation Bupropion – poor reporting of randomization and allocation concealment Varenicline – "generally high quality" but all were industry-sponsored	Not applicable
Cahill 2012	Inception-2011	Study-level meta-analysis	Continuous smoking cessation at 6 months, adverse events	Varenicline 20 trials (12,223 participants)	Varenicline, cardiac serious adverse events including deaths, RR 1.61 (95% CI 0.98-2.63) Smoking cessation at 6 months: Varenicline, RR 2.27 (95% CI 2.02-2.55)	Varenicline, any serious adverse events, RR 1.33 (95% CI 1.02-1.73)	Varenicline – generally low risk of selection, performance, and detection bias	11/11
Cahill 2013	Inception 2012	Overview of reviews Network meta-analysis	Continuous smoking cessation at 6 months, serious or life-threatening adverse events, reduction of withdrawal symptoms, reduction of craving, cardiovascular problems	NRT 119 trials (51,265 participants) Bupropion 48 trials (11,440 participants) Varenicline 20 trials (>6,000 participants)	"chest pains" and "palpitations" NRT, OR 1.88 (95% CI 1.37-2.57) CVD events: Bupropion, RR 0.77 (95% CI 0.37-1.59) Varenicline, RR 1.26 (95% CI 0.62-2.56) Smoking cessation at 6 months: NRT, OR 1.84 (95% CI 1.71-1.99) Bupropion, OR 1.82 (95% CI 1.60-2.06) Varenicline, OR 2.88 (95% CI 2.40-3.47)	Adverse events: NRT, little to no information Bupropion, RR 1.29 (95% CI 0.99-1.69) Varenicline, RR 1.06 (95% CI 0.72-1.55)	"All 12 reviews were classified as being of high quality, i.e. failing to score in only two or fewer of the 11 domains."	8/11

Author, year	Search time frame	Analysis	Outcomes	Trials (# participants)	Selected Effect Estimates	Adverse Effects	Study level quality	AMSTAR
Ebbert 2011	Inception – 2010	Study-level meta-analysis	Continuous smoking cessation at 6 months	NRT 8 trials (1,671 participants) Bupropion 2 trials (293 participants) Varenicline 1 trial (431 participants)	CVD events: Not reported Smoking cessation at 6 months: NRT, OR 1.14 (95% CI 0.91-1.42) Bupropion, OR 0.86 (95% CI 0.47-1.57) Varenicline, OR 1.60 (95% CI 1.08-2.36)	No quantitative synthesis	NRT, Bupropion, and Varenicline – no studies were high risk of bias, most were low risk of bias	10/11

* Denotes overview of systematic reviews
Abbreviations: IPD = individual participant data, CVD = cardiovascular disease, CHD = coronary heart disease, MI = myocardial infarction, NRT = nicotine replacement therapy
Details for tobacco cessation drugs limited to nicotine replacement therapy, bupropion, and varenicline.

eAppendix 4. List of Excluded Studies and Reasons for Exclusion

1. Aspirin.

Study	Notes
Ansara 2010	Exclusion reason: Secondary prevention population;
Bartolucci 2006	Exclusion reason: Not systematic review;
Bartolucci 2011	Exclusion reason: Not systematic review;
Bijl 2009	Exclusion reason: Non-English;
Butalia 2010	Exclusion reason: Incorrect citation/Duplicate;
Connolly 2013	Exclusion reason: Atrial fibrillation population;
Das 2010	Exclusion reason: Secondary prevention population;
Greco 2012	Exclusion reason: Non-English;
Iavelov 2006	Exclusion reason: Non-English;
Laguta 2005	Exclusion reason: Non-English;
Leaberry 2010	Exclusion reason: Did not include RCTs;
Li 2009	Exclusion reason: Incorrect citation/Duplicate;
Matthys 2014	Exclusion reason: Did not include RCTs;

Minar 2009	Exclusion reason: Non-English;
Raju 2009	Exclusion reason: Incorrect citation/Duplicate;
Simpson 2011	Exclusion reason: Did not include RCTs;
Sirois 2008	Exclusion reason: Did not include RCTs;
Tagliabue 2012	Exclusion reason: Not systematic review;
Tang 2010	Exclusion reason: Non-English;
Wilson 2012	Exclusion reason: Not systematic review;
Wong 2014	Exclusion reason: Secondary prevention population;
Xie 2014	Exclusion reason: Secondary prevention population;
Xie 2014	Exclusion reason: Incorrect citation/Duplicate;
Yerman 2007	Exclusion reason: Secondary prevention population;
Adelman 2011	Exclusion reason: Incorrect citation/Duplicate;
Selak 2010	Exclusion reason: Not systematic review;

2. **Blood pressure lowering drugs.**

Study	**Notes**
Li 2014	Exclusion reason: No placebo group;
Blood Pressure Lowering Treatment Trialists' 2014	Exclusion reason: Secondary prevention;

Blood Pressure Lowering Treatment Trialists' 2013	Exclusion reason: Secondary prevention;
Takagi 2013	Exclusion reason: Not systematic review;
Zaiken 2013	Exclusion reason: included non-RCTs;
Hackam 2013	Exclusion reason: Not systematic review;
Chen 2013	Exclusion reason: Secondary prevention;
Song 2012	Exclusion reason: non-English;
Roush 2012	Exclusion reason: No placebo group;
Daien 2012	Exclusion reason: No CVD outcomes;
Campbell 2011	Exclusion reason: Not systematic review;
Sciarretta 2011	Exclusion reason: Secondary prevention;
Talbert 2010	Exclusion reason: Secondary prevention;
Chen 2010	Exclusion reason: No placebo group;
Webb 2010	Exclusion reason: Secondary prevention;
Lu 2009	Exclusion reason: Secondary prevention;
Costanzo 2009	Exclusion reason: Secondary prevention;
Verdecchia 2009	Exclusion reason: Secondary prevention;
Chrysant 2008	Exclusion reason: No meta-analysis;
Bangalore 2008	Exclusion reason: Secondary prevention;

Musini 2008	Exclusion reason: No CVD outcomes;
Rabi 2008	Exclusion reason: Secondary prevention;
Baguet 2007	Exclusion reason: No CVD outcomes;
Park 2007	Exclusion reason: Secondary prevention;
Wang 2007	Exclusion reason: Secondary prevention;
Khan 2006	Exclusion reason: Secondary prevention;
Abuissa 2005	Exclusion reason: No CVD outcomes;
Verdecchia 2005	Exclusion reason: Secondary prevention;
Epstein 2005	Exclusion reason: Secondary prevention;
Baguet 2005	Exclusion reason: No CVD outcomes;
Bui 2010	Exclusion reason: Wrong study design;
Webb 2010	Exclusion reason: Secondary prevention;
Mourad 2013	Exclusion reason: Abstract only;
Mukete 2015	Exclusion reason: Abstract only;
Sciarretta 2011	Exclusion reason: Not systematic review;
Wu 2014	Exclusion reason: No placebo group;
Tocci 2010	Exclusion reason: Abstract only;
Park 2009	Exclusion reason: Abstract only;

Brugts 2015	Exclusion reason: Secondary prevention;
Roush 2012	Exclusion reason: Abstract only;
Mukete 2015	Exclusion reason: Secondary prevention;
Wu 2012	Exclusion reason: Abstract only;
Costanzo 2009	Exclusion reason: Abstract only;
Khan 2006	Exclusion reason: Secondary prevention;
Sciarretta 2009	Exclusion reason: Abstract only;
Elliott 2009	Exclusion reason: Abstract only;
Wu 2011	Exclusion reason: Abstract only;
Heran 2012	Exclusion reason: No CVD outcomes;

3. Statins.

Study	**Notes**
HTA-32006000062	Exclusion reason: Not systematic review;
HTA-32007000766	Exclusion reason: Not systematic review;
HTA-32011000252	Exclusion reason: non-English;
Adams 2015	Exclusion reason: Individual statin review;
Alberton 2012	Exclusion reason: Secondary prevention;

Ali 2007	Exclusion reason: Subgroup not included in protocol;
Chang 2013	Exclusion reason: Secondary prevention;
Fulcher 2011	Exclusion reason: Abstract with full-text included;
Fulcher 2013	Exclusion reason: Abstract with full-text included;
Kim 2014	Exclusion reason: unable to locate full-text
Kostis 2012	Exclusion reason: Secondary prevention;
Lowe 2015	Exclusion reason: Subgroup not included in protocol;
Montero-Balosa 2012	Exclusion reason: non-English;
O'Regan 2008	Exclusion reason: Secondary prevention;
Ray 2009	Exclusion reason: Abstract with full-text included;
Rosian 2006	Exclusion reason: non-English;
Savarese 2013	Exclusion reason: Subgroup not included in protocol;
Savarese 2013	Exclusion reason: Subgroup not included in protocol;
Taylor 2011	Exclusion reason: Duplicate;
Tonelli 2011	Exclusion reason: Secondary prevention;
Wang 2014	Exclusion reason: Secondary prevention;

4. Tobacco cessation drugs.

Study	Notes
Mills 2014	Exclusion reason: Secondary prevention;
Ware 2013	Exclusion reason: Secondary prevention;
Prochaska 2012	Exclusion reason: Secondary prevention;
Singh 2011	Exclusion reason: Secondary prevention;
Cahill 2012	Exclusion reason: Duplicate;
Singh 2011	Exclusion reason: Abstract and full text included;
Mills 2010	Exclusion reason: non-RCTs;
Huang 2012	Exclusion reason: Secondary prevention;
CADTH 2012	Exclusion reason: Secondary prevention;

5. Combination therapy.

Study	Notes
Liu 2014	Exclusion reason: Treatment <12 months;
Sever 2012	Exclusion reason: >10% with prevalent CVD;
Han 2012	Exclusion reason: >10% population with prevalent CVD;
Pan 2011	Exclusion reason: Wrong study design;
Gupta 2011	Exclusion reason: >10% with prevalent CVD;

Kanaoka 2011	Exclusion reason: Wrong study design;
Margolis 2009	Exclusion reason: >10% with prevalent CVD;
Haywood 2009	Exclusion reason: >10% with prevalent CVD;
Manisty 2009	Exclusion reason: >10% with prevalent CVD;
Sever 2009	Exclusion reason: >10% with prevalent CVD;
Cohn 2009	Exclusion reason: Treatment <12 months;
Ge 2008	Exclusion reason: Treatment <12 months;
Charbonneau 2008	Exclusion reason: >10% with prevalent CVD;
Sever 2008	Exclusion reason: >10% with prevalent CVD;
Gaede 2008	Exclusion reason: Wrong intervention;
Sever 2006	Exclusion reason: >10% with prevalent CVD;
Barzilay 2006	Exclusion reason: >10% with prevalent CVD;
Papademetriou 2003	Exclusion reason: >10% with prevalent CVD;
Geraci 2003	Exclusion reason: Wrong study design;
Sever 2003	Exclusion reason: >10% with prevalent CVD;
Bianchi 2003	Exclusion reason: Wrong patient population;
Gaede 2003	Exclusion reason: Wrong intervention;
Pressel 2001	Exclusion reason: >10% with prevalent CVD;

Sever 2001	Exclusion reason: >10% with prevalent CVD;
Barzilay 2001	Exclusion reason: >10% with prevalent CVD;
Pressel 2001	Exclusion reason: >10% with prevalent CVD;
Teo 2000	Exclusion reason: >10% with prevalent CVD;
Foss 1999	Exclusion reason: Wrong study design;
Maldonado 1998	Exclusion reason: Wrong study design;
Kendall 1998	Exclusion reason: Wrong study design;
Teo 1997	Exclusion reason: >10% population with prevalent CVD;
Teo 1997	Exclusion reason: >10% population with prevalent CVD;
Davis 1996	Exclusion reason: >10% with prevalent CVD;
Farr 1992	Exclusion reason: Wrong study design;
Anonymous 1992	Exclusion reason: Wrong intervention;
Tillin 2010	Exclusion reason: >10% with prevalent CVD;
Pal 2013	Exclusion reason: Treatment <12 months;
Gupta 2011	Exclusion reason: >10% with prevalent CVD;
Ma 2011	Exclusion reason: Wrong intervention;
Schulman 1998	Exclusion reason: Wrong study design;
Anonymous 1998	Exclusion reason: Wrong study design;

ALLHAT 2002	Exclusion reason: >10% with prevalent CVD;
Margolis 2013	Exclusion reason: >10% with prevalent CVD;
Sever 2012	Exclusion reason: >10% with prevalent CVD;
Sever 2005	Exclusion reason: >10% with prevalent CVD;
Rahman 2013	Exclusion reason: >10% with prevalent CVD;
Sever 2004	Exclusion reason: >10% with prevalent CVD;
Sever 2011	Exclusion reason: >10% with prevalent CVD;
Lindgren 2005	Exclusion reason: >10% with prevalent CVD;
Chapman 2011	Exclusion reason: >10% with prevalent CVD;
Collier 2011	Exclusion reason: >10% with prevalent CVD;
Sever 2006	Exclusion reason: Duplicate record;
Sever 2001	Exclusion reason: >10% with prevalent CVD;
Kjeldsen 2000	Exclusion reason: Duplicate record;
Kolloch 1998	Exclusion reason: Duplicate record;
Sever 2009	Exclusion reason: >10% with prevalent CVD;
Hansson 1998	Exclusion reason: Duplicate record;
Koh 2003	Exclusion reason: Treatment <12 months;
Pfizer 2006	Exclusion reason: Treatment <12 months;

NCT 2011	Exclusion reason: Treatment <12 months;
NCT 2013	Exclusion reason: Treatment <12 months;
NCT 2013	Exclusion reason: Treatment <12 months;
NCT 2010	Exclusion reason: Treatment <12 months;
Pfizer 2003	Exclusion reason: Treatment <12 months;
Pfizer 2003	Exclusion reason: Treatment <12 months;
Nct 2007	Exclusion reason: Treatment <12 months;
Hedblad 2001	Exclusion reason: Duplicate record;
Hobbs 2006	Exclusion reason: Treatment <12 months;
Dabrowski 2004	Exclusion reason: Treatment <12 months;
Kosmatova 1999	Exclusion reason: Treatment <12 months;
NCT 2011	Exclusion reason: Treatment <12 months;
Hedblad 2001	Exclusion reason: Duplicate record;
NCT 2004	Exclusion reason: Treatment <12 months;
Hobbs 2009	Exclusion reason: Treatment <12 months;
Pfizer 2005	Exclusion reason: Treatment <12 months;
Pfizer 2005	Exclusion reason: Treatment <12 months;
Pfizer 2005	Exclusion reason: Treatment <12 months;

Berglund 2000	Exclusion reason: >10% with prevalent CVD;
Schindler 2008	Exclusion reason: Treatment <12 months;
Koh 2004	Exclusion reason: Treatment <12 months;

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