

## Appendix 1. Search Strategy

Ovid MEDLINE	Ovid EMBASE	Ovid PsycINFO	Web of Science	Scopus
#1 exp Dementia/ or exp Dementia, Vascular/ or exp Frontotemporal Dementia/ or exp "Mental Status and Dementia Tests"/ or exp AIDS Dementia Complex/ or exp Dementia, Multi-Infarct/ or exp Alzheimer Disease/ or *Cognitive Dysfunction/	#1 exp dementia/ #2 Alzheimer disease.mp. or exp Alzheimer disease/ #3 Alzheimer*.mp. #4 cognitive impairment.mp. or *cognitive defect/ #5 cognit*.mp.	#1 exp dementia/ #2 Alzheimer disease.mp. or exp Alzheimer disease/ #3 Alzheimer*.mp. #4 cognitive impairment.mp. or *cognitive defect/ #5 cognit*.mp.	#1 ((dementia* or dementia or Alzheimer or Alzheimer disease or disease of the brain or cognitive impairment or cognitive dysfunction or cognit*)) (Title) #2 TS=(((hypertens* or Hypertension or blood pressure or midlife blood pressure or systolic blood pressure or diastolic blood pressure))) #3 TI=((antihypertens* or anti-hypertens* or Antihypertensive Agents or blood pressure-lowering drugs)) #4 TI=((calcium channel blockers or Calcium Channel Blockers or diuretics or Diuretics or beta blockers or Adrenergic beta-Antagonists or angiotensin-converting enzyme inhibitors or Angiotensin-Converting Enzyme Inhibitors or angiotensin ii receptor blockers or Angiotensin II Type 1 Receptor Blockers or Angiotensin II Type 2 Receptor Blockers or vasodilator antihypertensive or centrally-acting antihypertensive or adrenergic neurone block)) #5 #3 OR #4 #6 #1 AND #2 #7 #5 AND #6	#1 TITLE-ABS-KEY ("dementia*" OR "dementia" OR "Alzheimer" OR "Alzheimer disease" OR "Disease of the Brain" OR "cognitive impairment" OR "cognitive dysfunction" OR "cognit*" ) #2 TITLE-ABS-KEY ("hypertens*" OR "Hypertension" OR "blood pressure" OR "midlife blood pressure" OR "systolic blood pressure" OR "diastolic blood pressure" ) #3 TITLE-ABS-KEY ( antihypertens* OR anti-hypertens* OR "Antihypertensive Agents" OR "blood pressure-lowering drugs" #4 TITLE-ABS-KEY (amlodipine OR amlodipine OR diltiazem OR diltiazem OR felodipine OR felodipine OR isradipine OR isradipine OR lacidipine OR lercanidipine OR nicardipine OR nicardipine OR nifedipine OR nifedipine OR nimodipine OR nimodipine OR nisoldipine OR nisoldipine OR trimetazidine OR trimetazidine OR verapamil OR verapamil OR bendroflumethiazide OR bendroflumethiazide OR chlorothiazide OR chlorothiazide OR chlorthalidone OR chlorthalidone OR cyclopenthiazide OR
#2 Disease of the Brain.mp.	#6 1 or 2 or 3 or 4 or 5	#6 1 or 2 or 3 or 4 or 5		
#3 cognit*.mp.	#7 exp hypertension/	#7 exp hypertension/		
#4 exp Essential Hypertension/ or exp Hypertension/ or exp Blood Pressure/	#8 exp blood pressure/	#8 exp blood pressure/		
#5 midlife blood pressure.mp.	#9 (midlife blood pressure or systolic blood pressure or diastolic blood pressure).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, device trade name, keyword, floating subheading word, candidate term word]	#9 (midlife blood pressure or systolic blood pressure or diastolic blood pressure).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]		
#6 (systolic blood pressure or diastolic blood pressure).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]		
#7 hypertens*.mp.	#10 hypertens*.mp.	#10 hypertens*.mp.		
#8 1 or 2 or 3	#11 7 or 8 or 9 or 10	#11 7 or 8 or 9 or 10		
#9 4 or 5 or 6 or 7	#12 6 and 11	#12 6 and 11		
#10 8 and 9	#13 exp antihypertensive agent/	#13 exp antihypertensive agent/		
#11 exp Antihypertensive Agents/	#14 blood pressure-lowering drugs.mp. or exp antihypertensive therapy/	#14 blood pressure-lowering drugs.mp. or exp antihypertensive therapy/		
#12 blood pressure-lowering drugs.mp.	#15 (antihypertens* or anti-hypertens*).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating	#15 (antihypertens* or anti-hypertens*).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating		

<p>#13 (antihypertens* or anti-hypertens*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]</p>	<p>keyword, floating subheading word, candidate term word]</p>	<p>subheading word, candidate term word]</p>	<p>#8 #5 AND #6 and Articles (Document Types)</p>	<p>cyclopenthiiazide OR hydrochlorothiazide OR hydrochlorothiazide OR indapamide OR indapamide OR metolazone OR metolazone OR polythiazide OR polythiazide OR xipamide OR xipamide OR bumetanide OR bumetanide OR furosemide OR furosemide OR torasemide OR torasemide OR amiloride OR amiloride OR spironolactone OR spironolactone OR triamterene OR triamterene OR acebutolol OR acebutolol OR atenolol OR atenolol OR bisoprolol OR bisoprolol OR carvedilol OR carvedilol OR celiprolol OR celiprolol OR labetalol OR labetalol OR metoprolol OR metoprolol OR nadolol OR nadolol OR nebivolol OR nebivolol OR oxprenolol OR oxprenolol OR pindolol OR pindolol OR propranolol OR propranolol OR azilsartan OR candesartan OR captopril OR captopril OR cilazapril OR cilazapril OR enalapril OR enalapril OR eprosartan OR fosinopril OR fosinopril OR imidapril OR irbesartan OR irbesartan OR lisinopril OR lisinopril OR losartan OR losartan OR olmesartan OR olmesartan OR perindopril OR perindopril OR quinapril OR quinapril OR</p>
<p>#14 (calcium channel blockers or Calcium Channel Blockers or diuretics or Diuretics or beta blockers or Adrenergic beta-Antagonists or angiotensin-converting enzyme inhibitors or Angiotensin-Converting Enzyme Inhibitors or angiotensin ii receptor blockers or Angiotensin II Type 1 Receptor Blockers or Angiotensin II Type 2 Receptor Blockers or vasodilator antihypertensive or centrally-acting antihypertensive or adrenergic neurone block* or amlodipine or Amlodipine or diltiazem or Diltiazem or felodipine or Felodipine or isradipine or Isradipine or lacidipine or lercanidipine or nicardipine or Nifedipine or Nimodipine or Nisoldipine or Nisoldipine or trimetazidine or Trimetazidine or verapamil or Verapamil or bendroflumethiazide or Bendroflumethiazide or chlorothiazide or Chlorothiazide or chlortalidone or chlortalidone or cyclopenthiiazide or Hydrochlorothiazide or indapamide or Indapamide or metolazone or</p>	<p>#16 (calcium channel blockers or Calcium Channel Blockers or diuretics or Diuretics or beta blockers or Adrenergic beta-Antagonists or angiotensin-converting enzyme inhibitors or Angiotensin-Converting Enzyme Inhibitors or angiotensin ii receptor blockers or Angiotensin II Type 1 Receptor Blockers or Angiotensin II Type 2 Receptor Blockers or vasodilator antihypertensive or centrally-acting antihypertensive or adrenergic neurone block*).m_titl.</p> <p>#17 (amlodipine or Amlodipine or diltiazem or Diltiazem or felodipine or Felodipine or isradipine or Isradipine or lacidipine or lercanidipine or nicardipine or Nifedipine or Nimodipine or Nisoldipine or Nisoldipine or trimetazidine or Trimetazidine or verapamil or Verapamil or bendroflumethiazide or Bendroflumethiazide or chlorothiazide or Chlorothiazide or chlortalidone or chlortalidone or cyclopenthiiazide or Cyclopenthiiazide or hydrochlorothiazide or Hydrochlorothiazide or indapamide or Indapamide or metolazone or</p>	<p>#16 (calcium channel blockers or Calcium Channel Blockers or diuretics or Diuretics or beta blockers or Adrenergic beta-Antagonists or angiotensin-converting enzyme inhibitors or Angiotensin-Converting Enzyme Inhibitors or angiotensin ii receptor blockers or Angiotensin II Type 1 Receptor Blockers or Angiotensin II Type 2 Receptor Blockers or vasodilator antihypertensive or centrally-acting antihypertensive or adrenergic neurone block*).m_titl.</p> <p>#17 (amlodipine or Amlodipine or diltiazem or Diltiazem or felodipine or Felodipine or isradipine or Isradipine or lacidipine or lercanidipine or nicardipine or Nicardipine or nifedipine or Nifedipine or nimodipine or Nimodipine or Nisoldipine or trimetazidine or Trimetazidine or verapamil or Verapamil or bendroflumethiazide or Bendroflumethiazide or chlorothiazide or Chlorothiazide or chlortalidone or chlortalidone or cyclopenthiiazide or Cyclopenthiiazide or hydrochlorothiazide or Hydrochlorothiazide or indapamide or Indapamide or metolazone or polythiazide or</p>		

Chlorothiazide or chlortalidone or chlorthalidone or Chlorthalidone or cyclopenthiiazide or Cyclopenthiiazide or hydrochlorothiazide or Hydrochlorothiazide or indapamide or Indapamide or metolazone or Metolazone or polythiazide or Polythiazide or xipamide or Xipamide or bumetanide or Bumetanide or furosemide or Furosemide or torasemide or Torasemide or amiloride or Amiloride or spironolactone or Spironolactone or triamterene or Triamterene or acebutolol or Acebutolol or atenolol or Atenolol or bisoprolol or Bisoprolol or carvedilol or Carvedilol or celiprolol or Celiprolol or labetalol or Labetalol or metoprolol or Metoprolol or nadolol or Nadolol or nebivolol or Nebivolol or oxprenolol or Oxprenolol or pindolol or Pindolol or propranolol or Propranolol or azilsartan or Azilsartan or candesartan or Candesartan or captopril or Captopril or cilazapril or Cilazapril or enalapril or Enalapril or eprosartan or Eprosartan or fosinopril or Fosinopril or imidapril or Imidapril or irbesartan or Irbesartan or lisinopril or Lisinopril or losartan or Losartan or moexipril or Olmesartan or Perindopril or Perindopril or quinapril or Quinapril or ramipril or Ramipril or telmisartan or Telmisartan or trandolapril or Valsartan or Valsartan or ambrisentan or Ambrisentan or bosentan or Bosentan or diazoxide or Diazoxide or hydralazine or Hydralazine or iloprost or Iloprost or macitentan or Macitentan or minoxidil or Minoxidil or riociguat or Riociguat or sildenafil or Sildenafil or sitaxentan or Sitaxentan or tadalafil or Tadalafil or clonidine or Clonidine or guanfacine or Guanfacine or methyl dopa or Methyl dopa	Metolazone or polythiazide or Polythiazide or xipamide or Xipamide or bumetanide or Bumetanide or furosemide or Furosemide or torasemide or Torasemide or amiloride or Amiloride or spironolactone or Spironolactone or triamterene or Triamterene or acebutolol or Acebutolol or atenolol or Atenolol or bisoprolol or Bisoprolol or carvedilol or Carvedilol or celiprolol or Celiprolol or labetalol or Labetalol or metoprolol or Metoprolol or nadolol or Nadolol or nebivolol or Nebivolol or oxprenolol or Oxprenolol or pindolol or Pindolol or propranolol or Propranolol or azilsartan or Azilsartan or candesartan or Candesartan or captopril or Captopril or cilazapril or Cilazapril or enalapril or Enalapril or eprosartan or fosinopril or Fosinopril or imidapril or Imidapril or irbesartan or Irbesartan or lisinopril or Lisinopril or losartan or Losartan or moexipril or Olmesartan or Perindopril or Perindopril or quinapril or Quinapril or ramipril or Ramipril or telmisartan or Telmisartan or trandolapril or valsartan or Valsartan or ambrisentan or bosentan or bosentan or diazoxide or Diazoxide or hydralazine or Hydralazine or iloprost or Iloprost or macitentan or minoxidil or Minoxidil or riociguat or sildenafil or Sildenafil or sitaxentan or tadalafil or Tadalafil or clonidine or Clonidine or	Polythiazide or xipamide or Xipamide or bumetanide or Bumetanide or furosemide or Furosemide or torasemide or Torasemide or amiloride or Amiloride or spironolactone or Spironolactone or triamterene or Triamterene or acebutolol or Acebutolol or atenolol or Atenolol or bisoprolol or Bisoprolol or carvedilol or Carvedilol or celiprolol or Celiprolol or labetalol or Labetalol or metoprolol or Metoprolol or nadolol or Nadolol or nebivolol or Nebivolol or oxprenolol or Oxprenolol or pindolol or Pindolol or propranolol or Propranolol or azilsartan or Azilsartan or candesartan or Candesartan or captopril or Captopril or cilazapril or Cilazapril or enalapril or Enalapril or eprosartan or fosinopril or Fosinopril or imidapril or Imidapril or irbesartan or Irbesartan or lisinopril or Lisinopril or losartan or Losartan or moexipril or Olmesartan or Perindopril or Perindopril or quinapril or Quinapril or ramipril or Ramipril or telmisartan or Telmisartan or trandolapril or valsartan or Valsartan or ambrisentan or bosentan or Bosentan or diazoxide or Diazoxide or hydralazine or Hydralazine or iloprost or Iloprost or macitentan or minoxidil or Minoxidil or riociguat or Riociguat or sildenafil or Sildenafil or sitaxentan or tadalafil or Tadalafil or clonidine or Clonidine or guanfacine or Guanfacine or methyl dopa or Methyl dopa	ramipril OR ramipril OR telmisartan OR telmisartan OR trandolapril OR valsartan OR valsartan OR ambrisentan OR bosentan OR bosentan OR diazoxide OR diazoxide OR hydralazine OR hydralazine OR iloprost OR iloprost OR macitentan OR minoxidil OR minoxidil OR riociguat OR sildenafil OR sildenafil OR sitaxentan OR tadalafil OR tadalafil OR clonidine OR clonidine OR guanfacine OR guanfacine OR methyl dopa OR methyl dopa OR phenoxymethamine OR phenoxymethamine OR phentolamine OR phentolamine AND prazosin OR prazosin OR terazosin OR ketanserin OR ketanserin)  #5 #4 OR #5  #6 #1 AND #2  #7 #5 AND #6  #8 AND ( LIMIT-TO ( DOCTYPE , "ar" )) AND ( LIMIT-TO ( EXACTKEYWORD , "Human" ) OR LIMIT-TO ( EXACTKEYWORD , "Humans" ) )
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<p>ambrisentan or bosentan or Bosentan or diazoxide or Diazoxide or hydralazine or Hydralazine or iloprost or Iloprost or macitentan or minoxidil or Minoxidil or riociguat or sildenafil or Sildenafil or sitaxentan or tadalafil or Tadalafil or clonidine or Clonidine or guanfacine or Guanfacine or methylodopa or Methylodopa or moxonidine or guanethidine or Guanethidine or doxazosin or Doxazosin or indoramin or Indoramin or phenoxybenzamine or Phenoxybenzamine or phentolamine or Phentolamine prazosin or Prazosin or terazosin or ketanserin or Ketanserin).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]</p> <p>#15 11 or 12 or 13 or 14</p> <p>#16 10 and 15</p> <p>#17 limit 17 to (humans and (introductory journal article or journal article or observational study))</p>	<p>guanfacine or Guanfacine or methylodopa or Methylodopa or moxonidine or guanethidine or Guanethidine or doxazosin or Doxazosin or indoramin or Indoramin or phenoxybenzamine or Phenoxybenzamine or phentolamine or Phentolamine prazosin or Prazosin or terazosin or ketanserin or Ketanserin).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]</p> <p>#18 13 or 14 or 15 or 16 or 17</p> <p>#19 12 and 18</p> <p>#20 limit 19 to (human and article and journal)</p>	<p>Methylodopa or moxonidine or guanethidine or Guanethidine or doxazosin or Doxazosin or indoramin or Indoramin or phenoxybenzamine or Phenoxybenzamine or phentolamine or Phentolamine prazosin or Prazosin or terazosin or ketanserin or Ketanserin).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]</p> <p>#18 13 or 14 or 15 or 16 or 17</p> <p>#19 12 and 18</p> <p>#20 limit 19 to (human and article and journal)</p>
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