Appendix E1: Included – Excluded Studies

Patient information

Included list

Study
Weetch RM. Patient satisfaction with information received after a diagnosis of angina. *Prof Nurse*. 2003; 19(3):150-153.
McGillion MH, Watt-Watson JH, Kim J et al. Learning by heart: a focused group study to determine the self-management learning needs of chronic stable angina patients. *Can J Cardiovasc Nurs*. 2004; 14(2):12-22.
Karlik BA, Yarcheski A, Braun J et al. Learning needs of patients with angina: an extension study. *J Cardiovasc Nurs*. 1990; 4(2):70-82.
Pier C, Shandley KA, Fisher JL et al. Identifying the health and mental health information needs of people with coronary heart disease, with and without depression. *Med J Aust*. 2008; 188(12 Suppl):S142-S144.

Excluded list

Study	Reasons for exclusion
Anon. For your patient's information. When you have angina. Family Practice Recertification. 1995; 17(1):52.	article
Berra K, Fletcher B, Miller NH. Chronic stable angina: Addressing the needs of patients through risk reduction, education and support. Clinical & Investigative Medicine - Medecine Clinique et Experimentale. 2008; 31(6):E391-E399.	Conference report on – The get tough on Angina Program
Asadi-Lari M, Packham C, Gray D. Unmet health needs in patients with coronary heart disease: implications and potential for improvement in caring services. Health &	All patients had symptoms suggestive of MI

Quality of Life Outcomes. 2003; 1:26.	
Czar ML, Engler MM. Perceived learning needs of patients with coronary artery disease using a questionnaire assessment tool. Heart & Lung. 1997; 26(2):109-117.	Only 12 patients with angina
McLennan M, Anderson GS, Pain K. Rehabilitation learning needs: patient and family perceptions. Patient Educ Couns. 1996; 27(2):191-199.	Not angina population

Short Acting Nitrates

Included Studies

Study
Sandler G, Clayton GA. Glyceryl trinitrate in angina pectoris: tablet or aerosol? *Br Med J*. 1967; 4(5574):268-270.
Pupita G, Mazzara D, Centanni M et al. Ischemia in collateral-dependent myocardium: effects of nifedipine and diltiazem in man. *Am Heart J*. 1993; 126(1):86-94.
Mooss AN, Mohiuddin SM, Hilleman DE et al. A comparison of sublingual nifedipine versus nitroglycerin in the treatment of acute angina pectoris. *DICP*. 1989; 23(7-8):562-564.
Ryden L, Schaffrath R. Buccal versus sublingual nitroglycerin administration in the treatment of angina pectoris: a multicentre study. *Eur Heart J*. 1987; 8(9):995-1001.
Marra S, Paolillo V, Baduini G et al. Acute effects of chewable nifedipine on hemodynamic responses to upright exercise in patients with prior myocardial infarction and effort angina. *Chest*. 1983; 83(1):50-55.
Atterhog JH, Ekelund LG, Melin AL. Effect of nifedipine on exercise tolerance in patients with angina pectoris. *Eur J Clin Pharmacol*. 1975; 8(2):125-130.

Excluded Studies

Study	Reasons for exclusion
Sato H, Koretsune Y, Taniguchi T et al. Studies on the response of nitroglycerin oral spray compared with sublingual tablets for angina pectoris patients with dry mouth. A multicenter trial. *Arzneimittelforschung*. 1997; 47(2):128-131.	This study examined the comparative effectiveness of GTN spray and sublingual tablets in

	participants with wet and dry mouths
Stason WB, Schmid CH, Caubet JF et al. Searching for signals: mortality and cardiovascular events in published randomized control trials of nifedipine in ischemic heart disease and hypertension. *Journal of Hypertension - Supplement*. 1996; 14(2):S5-S7.	The intervention of long acting nifedipine is not relevant
Bray CL, Jain S, Faragher EB et al. A comparison of buccal nitroglycerin and sublingual nitroglycerin in the prophylaxis and treatment of exertional (situation-provoked) angina pectoris. *Eur Heart J*. 1991; 12(Suppl A):16-20.	This study did not present usable data for outcomes relevant to the question
Ryden L. Buccal versus sublingual glyceryl trinitrate administration in the treatment of angina pectoris. A Swedish multicentre study. *Drugs*. 1987; 33(Suppl 4):96-99.	Secondary publication of included Ryden 1987 study
Metelitsa VI, Martsevich SY, Piotrovskii VK et al. New transdermal and transmucosal nitroglycerin delivery systems in patients with ischaemic heart disease. *Eur J Clin Pharmacol*. 1987; 32(1):5-10.	Not short acting nitrates
Parker JO, Vankoughnett KA, Farrell B. Nitroglycerin lingual spray: clinical efficacy and dose-response relation. *Am J Cardiol*. 1986; *57*(1):1-5.	This study randomised patients to different schedules of treatment with 3 doses of GTN spray and placebo, but did not randomise the sequencing of treatment with sublingual GTN tablet.
Nyberg G. The time of onset of action of sublingual nitroglycerin in exercise-induced angina pectoris. A methodological study. *Eur Heart J*. 1985; 6(7):625-630.	The comparison of sublingual GTN vs placebo is not relevant
Langbehn AF, Sheikhzadeh A, Stierle U et al. Effect of buccal nitroglycerin on pulmonary artery pressure at rest and during exercise: a comparison with sublingual	The comparison of slow release buccal GTN vs

nitroglycerin in patients with coronary artery disease. *Z Kardiol*. 1983; 72(Suppl 3):239-245.	sublingual GTN is not relevant
Parsons DG, Goldberg AA, Edgar P et al. Buccal nitroglycerin in routine clinical practice. A multicentre study. *Br J Clin Pract*. 1983; 37(9):295-298.	Open study
Kimchi A, Lee G, Amsterdam E et al. Increased exercise tolerance after nitroglycerin oral spray: a new and effective therapeutic modality in angina pectoris. *Circulation*. 1983; 67(1):124-127.	The comparison of GTN spray vs placebo is not relevant
Ludbrook PA, Tiefenbrunn AJ, Reed FR et al. Acute hemodynamic responses to sublingual nifedipine: dependence on left ventricular function. *Circulation*. 1982; 65(3):489-498.	Haemodynamic outcomes
Gunther S, Muller JE, Mudge GH, Jr. et al. Therapy of coronary vasoconstriction in patients with coronary artery disease. *Am J Cardiol*. 1981; 47(1):157-162.	Case series study
Stason WB, Schmid CH, Niedzwiecki D et al. Safety of nifedipine in angina pectoris: a meta-analysis. *Hypertension*. 1999; 33(1):24-31.	Meta-analysis
Wight LJ, Vandenburg MJ, Potter CE et al. A large scale comparative study in general practice with nitroglycerin spray and tablet formulations in elderly patients with angina pectoris. *Eur J Clin Pharmacol*. 1992; 42(3):341-342.	Comparative study

BETA BLOCKERS VS. CALCIUM CHANNEL BLOCKERS

Included studies

Study
Hjemdahl P, Eriksson SV, Held C et al. Favourable long term prognosis in stable angina pectoris: an extended follow up of the angina prognosis study in Stockholm (APSIS). *Heart*. 2006; 92(2):177-182.
Rehnqvist N, Hjemdahl P, Billing E et al. Effects of metoprolol vs verapamil in patients with stable angina pectoris. The Angina Prognosis Study in Stockholm (APSIS). *Eur Heart J*. 1996; 17(1):76-81.
Singh S. Long-term double-blind evaluation of amlodipine and nadolol in patients with stable exertional angina pectoris. *Clin Cardiol*. 1993; 16(1):54-58.
Pepine CJ, Handberg EM, Cooper DR et al. A calcium antagonist vs a non-calcium antagonist hypertension treatment strategy for patients with coronary artery disease. The International Verapamil-Trandolapril Study (INVEST): a randomized controlled trial. Journal of the American Medical Association. 2003;

290(21):2805-2816.
Dargie HJ, Ford I, Fox KM. Total Ischaemic Burden European Trial (TIBET). Effects of ischaemia and treatment with atenolol, nifedipine SR and their combination on outcome in patients with chronic stable angina. The TIBET Study Group. Eur Heart J. 1996; 17(1):104-112.
van Dijk RB, Lie KI, Crijns HJ. Diltiazem in comparison with metoprolol in stable angina pectoris. Eur Heart J. 1988; 9(11):1194-1199.
Pehrsson SK, Ringqvist I, Ekdahl S et al. Monotherapy with amlodipine or atenolol versus their combination in stable angina pectoris. Clin Cardiol. 2000; 23(10):763-770.
O'Hara MJ, Khurmi NS, Bowles MJ et al. Diltiazem and propranolol combination for the treatment of chronic stable angina pectoris. *Clin Cardiol*. 1987; 10(2):115-123.
Kawanishi DT, Reid CL, Morrison EC et al. (1992) Response of angina and ischemia to long-term treatment in patients with chronic stable angina: a double-blind randomized individualized dosing trial of nifedipine, propranolol and their combination. *Journal of the American College of Cardiology* 19 (2): 409-17.
Savonitto S, Ardissiono D, Egstrup K et al. (1996) Combination therapy with metoprolol and nifedipine versus monotherapy in patients with stable angina pectoris. Results of the International Multicenter Angina Exercise (IMAGE) Study. *Journal of the American College of Cardiology* 27 (2): 311-6.
Vliegen HW, van der Wall EE, Niemeyer MG, et al. Long term efficacy of diltiazem controlled release versus metaprolol in patients with stable angina pectoris. J Cardiovasc Pharmacol 1991; 18 (suppl 9): S 55-S 60.

Excluded studies

STUDY	Reasons for exclusion
Quyyumi AA, Crake T, Wright CM et al. Medical treatment of patients with severe exertional and rest angina: double blind comparison of beta blocker, calcium antagonist, and nitrate. *Br Heart J*. 1987; 57(6):505-511.	N=9; Follow-up 5 days
Bowles MJ, Subramanian VB, Davies AB et al. Comparison of antianginal actions of verapamil and propranolol. *Br Med J*. 1981; . 282(6278):1754.	N=22; Follow-up 4 weeks

Alderman EL, Davies RO, Crowley JJ et al. Dose response effectiveness of propranolol for the treatment of angina pectoris. *Circulation*. 1975; 51(6):964-975.	BB vs. placebo
Amsterdam EA, Gorlin R, Wolfson S. Evaluation of long-term use of propranolol in angina pectoris. *Journal of the American Medical Association*. 1969; 210(1):103-106.	BB vs. placebo
Lagioia R, Mangini SG, Dibenedetto A. Duration of action and dose response effectiveness of diltiazem in patients with stable effort angina. Comparison with propranolol. *Cardiologia*. 1985; 30(3):213-221.	Paper not in English
Novo S, Adamo L, Strano A. Evaluation of antianginal efficacy of chronic administration of diltiazem in patients with stable effort angina. A double-blind cross-over controlled study in comparison with propranolol. *Cardiologia*. 1985; 30(12):1153-1162.	Paper not in English
Mariani M, Mattioli G, Condorelli M. Multicenter study on diltiazem vs. propranolol in angina of effort. *Cardiologia*. 1985; 30(2 SUPPL.):23-29.	Paper not in English
Picca M, Pompilio ST, Cereda A. The comparison of the effects of propranolol and diltiazem on exercise tolerance in patients with stable exertional angina pectoris. *Acta Toxicologica et Therapeutica*. 1985; 6(3):179-188.	N=9 ; Follow-up 1 week
Bassan MB, Weiler RD, Shalev O. Additive antianginal effect of verapamil in patients receiving propranolol. *Br Med J*. 1982; 284(6322):1067-1070.	N=10; Follow-up 1 and 2 days after treatment
Asanoi H, Kuboki M, Yamamoto M. Comparative effects of isosorbide dinitrate (ISDN), nifedipine (Nf) and propranolol (P) in different types of effort angina. A study by treadmill exercise test (abstract). *Jpn Circ J*. 1982; 46(8):835-836.	Abstract
Dargie HJ, Lynch PG, Krikler DM et al. Anti-anginal effects of propranolol and	Abstract

nifedipine. *Br Heart J*. 1980; 43(6):724.	
Kinoshita M, Motomura M, Kusukawa R et al. Comparison of hemodynamic effects between beta-blocking agents and a new antianginal agent, diltiazem hydrochloride. *Jpn Circ J*. 1979; 43(6):587-598.	Only 4/24 patients with angina, rest were normal subjects (8), with hypertension (11), and with old MI (1). Outcomes not within remit (BP, HR, stroke volume, cardiac work index)
Kugiyama K, Yasue H, Horio Y. Effects of propranolol and nifedipine on exercise-induced attack in patients with variant angina: Assessment by exercise thallium-201 myocardial scintigraphy with quantitative rotational tomography. *Circulation*. 1986; 74(2):374-380.	Patients with variant angina
Antaloczy Z, Kekes E. Antianginal effects of atenolol and pindolol in patients with stable effort angina pectoris. Journal of Drug Development. 1989; 2(1):21-26.	BB vs. BB
Dalla-Volta S, Scorzelli L. Clinical experience with nadolol in severe stable angina pectoris. Drugs Under Experimental & Clinical Research. 1980; 6(6):611-615.	BB vs. BB
Ogawa H. Comparison of Therapeutic Effects of Nisoldipine, Metoprolol, and Long-Acting Isosorbide Dinitrate in Patients with Stable Effort Angina: A Randomized Cross-Over Study. Rinsho to Kenkyu (Japanese Journal of Clinical and Experimental Medicine). 1994; 71(8):2179-2184.	Paper in Japanese
Kato K, Otsu F, Sugimoto T et al. Comparison of Atenolol and Diltiazem in the Therapy of Asymptomatic and Symptomatic Ischemia in Patients with Stable Angina: A Multi-Center Double Blind Cross-Over Trial. Rinsho Iyaku (Journal of Clinical Therapeutics and Medicines). 1991; 7(4):891-916.	Paper in Japanese
Klein G, Pfafferott C, Beil S et al. Effect of metoprolol and amlodipine on myocardial total ischaemic burden in patients with stable angina pectoris. Journal of Clinical Pharmacy	Follow-up 8 weeks (4 weeks each drug therapy).

& Therapeutics. 1997; 22(5-6):371-378.	
Charlap S, Frishman WH. Comparative effects of verapamil and beta blockers in the therapy for patients with stable angina pectoris. Cardiovascular Reviews & Reports. 1983; 4(1):66-80.	Review – relevant references identified.
de Vries R, Dunselman PHJM. Monotherapy with nifedipine GITS compared with atenolol in stable angina pectoris. Br J Clin Pract. 1997; 51(Suppl 88):6-9.	Follow-up 4 weeks
Aneja P, Srinivas A, Biswas AD. Comparative clinical study of the efficacy and safety of a S-metoprolol ER tablet versus a racemate metoprolol ER tablet in patients with chronic stable angina. International Journal of Clinical Pharmacology & Therapeutics. 2007; 45(5):253-258.	BB vs. BB
Lesbre JP, Lalau JD, Jaubourg ML et al. Verapamil vs propranolol in stable effort angina. A randomised, cross-over, doluble-blind study. Annals of Cardiology & Angeiology. 1988; 37(4):205-210.	Paper not in English
Chauhan A, Dardas P, Tirlapur V et al. A comparison of atenolol with controlled release diltiazem in chronic stable angina. Journal of Clinical Research. 1998; 1:357-365.	Follow-up 6 weeks
Wheatley D. A comparison of diltiazem and atenolol in angina. Postgrad Med J. 1985; 61(719):785-789.-	Follow-up 6 weeks
Stone PH, Gibson RS, Glasser SP et al. Comparison of propranolol, diltiazem, and nifedipine in the treatment of ambulatory ischemia in patients with stable angina. Differential effects on ambulatory ischemia, exercise performance, and anginal symptoms. The ASIS Study Group. Circulation. 1990; 82(6):1962-1972. -	Data cannot be analysed (Mean values reported, but not SD); Follow-up 9-10 weeks.
Frishman WH, Klein NA, Strom JA. Superiority of verapamil to propranolol in stable angina pectoris: A double-blind, randomized crossover trial. Circulation. 1982; 65(1 II):I-51.	N=20; follow-up 6 weeks

Higginbotham MB, Morris KG, Coleman RE et al. Comparison of nifedipine alone with propranolol alone for stable angina pectoris including hemodynamics at rest and during exercise. Am J Cardiol. 1986; 57(13):1022-1028.	Results reported graphically
McGill D, McKenzie W, McCredie M. Comparison of nicardipine and propranolol for chronic stable angina pectoris. Am J Cardiol. 1986; 57(1):39-43.	Follow-up 4 weeks
Silke B, Nelson GIC. Nifedipine and beta-blockade: a safe haemodynamic combination in angina pectoris (abstract). Ir J Med Sci. 1982; 151(12):396-397.	Abstract
Pfisterer M, Mnller B, J. et al. Treatment of Angina-Pectoris With Acebutolol and Nifedipine: Clinical and Hemodynamic Advantages of the Combination as Opposed to the Monotherapies. Schweizerische Medizinische Wochenschrift. 1981; 111(45):1727.	Non English abstract
Pfisterer M. Combined administration of acebutolol and nifedipine in patients with stable angina pectoris. Med Welt. 1980; 31(47):1729.	Non English abstract
Singh S, Doherty J, Udhoji V et al. Amlodipine versus nadolol in patients with stable angina pectoris. Am Heart J. 1989; 118(5:Pt 2):1137-1138.	Abstract
Cocco G, Strozzi C, Chu D et al. Therapeutic effects of pindolol and nifedipine in patients with stable angina pectoris and asymptomatic resting ischemia. Eur J Cardiol. 1979; 10(1):59-69.	Follow-up 45 days
Heilmann E. Treatment of stable angina pectoris. Diltiazem in comparison with isosorbide mononitrate. Internist Prax. 1988; 28(1):203-209.	Non English paper
Manca C, Bernardini B, Bolognesi R. Comparative evaluation of diltiazem, verapamil and nifedipine in stable angina pectoris. Clinica Terapeutica Cardiovasc.	Non English paper

1986; 5(4):233-239.	
Carboni GP, EM D. An atenolol-nifedipine combination in exertional angina. An ergometric study. Clinica Therapeutica. 1986; 116(1):31-37.	Non English paper
Aschermann M, Bultas J, Karetova D et al. Randomized double-blind comparison of isosorbide dinitrate and nifedipine in the treatment of variant angina pectoris. Cas Lek Cesk. 1989; 128(37):1178-1181.	Non English paper
Young KD, MacDonald G. Treatment of angina pectoris in general practice with a combination of nifedipine and beta-blocker. Br J Clin Pract. 1982; 36(3):103-110.	Non-RCT
Subramanian VB, Bowles MJ, Davies AB et al. Calcium channel blockade as primary therapy for stable angina pectoris. A double-blind placebo-controlled comparison of verapamil and propranolol. Am J Cardiol. 1982; 50(5):1158-1163.	Follow-up 8 weeks (4 weeks each drug therapy)
Bowles MJ, Bala S, V, Davies AB et al. Double-blind randomized crossover trial of verapamil and propranolol in chronic stable angina. Am Heart J. 1983; 106(6):1297-1306.	Follow-up 8 weeks(4 weeks each drug therapy)
Forslund L, Hjemdahl P, Held C et al. Prognostic implications of results from exercise testing in patients with chronic stable angina pectoris treated with metoprolol or verapamil. A report from the Angina Prognosis Study In Stockholm (APSIS). *Eur Heart J*. 2000; 21(11):901-910.	Prognostic implications; exercise test after 1 week.
Banerjea JC, Mukherjee SK, Mukherjee TP. Propranolol in the therapy of ischaemic heart disease with angina pectoris. Indian Heart J. 1969; 21(3):259-272.	BB vs. placebo
Ahuja RC, Sinha N, Kumar RR et al. Effect of metoprolol and diltiazem on the total ischaemic burden in patients with chronic stable angina: a randomized controlled trial. Int J Cardiol. 1993; 41(3):191-199.	Follow-up 4 weeks
Metcalfe MJ, Jennings K. A cross-over study comparing the efficacy of a combination of atenolol and nifedipine at different doses in	N=21; follow-up 4 weeks

angina pectoris. Current Medical Research & Opinion. 1995; 13(5):251-256.	
Metcalfe MJ, Jennings K. A cross-over study comparing the efficacy of a combination of atenolol and nifedipine at different doses in angina pectoris. Current Medical Research & Opinion. 1995; 13(5):251-256.	abstract
Kenmure AC, Scruton JH. A double-blind controlled trial of the anti-anginal efficacy of nifedipine compared with propranolol. Br J Clin Pract. 1979; 33(2):49-51.	N=21; follow-up 8 weeks
Kenmure AC, Scruton JH. A double-blind controlled trial of the anti-anginal efficacy of nifedipine compared with propranolol. Br J Clin Pract. 1980;(Suppl 8):49-52.	N=21; follow-up 8 weeks
Meyer TE, Adnams C, Commerford P. Comparison of the efficacy of atenolol and its combination with slow-release nifedipine in chronic stable angina. Cardiovascular Drugs & Therapy. 1993; 7(6):909-913.	Follow-up 8 weeks (4 weeks each drug therapy)
van Kesteren HA, Withagen AJ. A comparative study of once-daily amlodipine versus twice-daily diltiazem controlled release (CR) in the treatment of stable angina pectoris. Amlodipine Study Group. Cardiovascular Drugs & Therapy. 1998; 12(Suppl 3):233-237.	CCB vs. CCB
Chugh SK, Digpal K, Hutchinson T et al. A randomized, double-blind comparison of the efficacy and tolerability of once-daily modified-release diltiazem capsules with once-daily amlodipine tablets in patients with stable angina. J Cardiovasc Pharmacol. 2001; 38(3):356-364.	CCB vs. CCB
Antaloczy Z, Kekes E. Anti-anginal effect of Tenormin (atenolol). Ther Hung. 1992; 40(2):58-63.	BB vs. placebo
Southall E, Nutt NR, Thomas RD. Chronic stable angina: comparison of verapamil and propranolol. J Int Med Res. 1982; 10(5):361-366.	N=19; follow-up 4 weeks
de Muinck ED, Buchner MD, van D, V et al. Comparison of the safety and efficacy of	BB vs. BB

bisoprolol versus atenolol in stable exercise-induced angina pectoris: a Multicenter International Randomized Study of Angina Pectoris (MIRSA). J Cardiovasc Pharmacol. 1992; 19(6):870-875.	
Radice M, Giudici M, Albertini A. Metoprolol, nifedipine and dialtiazem efficacy in stable angina. G Ital Cardiol. 1990;(Suppl 1):112.	Non-English abstract
Romano M, Di MT, Cotecchia MR et al. Long-term management of exercise-induced myocardial ischemia. Diltiazem versus propranolol, a double-blind, crossover study. International Journal of Clinical Pharmacology, Therapy & Toxicology. 1986; 24(10):551-554.	N=13
Johnson SM, Mauritson DR, Corbett JR et al. Double-blind, randomized, placebo-controlled comparison of propranolol and verapamil in the treatment of patients with stable angina pectoris. Am J Med. 1981; 71(3):443-451.	N=18
DeCesare N, Bartorelli A, Fabbiocchi F et al. Superior efficacy of propranolol versus nifedipine in double-component angina, as related to different influences on coronary vasomotility. Am J Med. 1989; 87(1):15-21.	Outcome outside remit (quantitative angiographic evaluation of the influence of the drug)
Sadick N, Tan ATH, Fletcher P. Double-blind trial to evaluate beta-blocker versus calcium antagonist in the management of effort angina (Ralph Reader Prize). Australian & New Zealand Journal of Medicine. 1981; 11(4):453.	abstract
Sigurd B, Hansen JF. Verapamil or propranolol in the treatment of stable angina pectoris of effort. Acta Medica Scandinavica - Supplementum. 1984; 681:75-81.	N=19
Arstila M, Kallio V, Wendelin H. Propranolol and LB 46 (prinodolol) in angina pectoris. A comparative long-term ergometric study. Ann Clin Res. 1973; 5(2):91-100.	BB vs. BB
Ardissino D, Savonitto S, Egstrup K et al. Selection of medical treatment in stable angina pectoris: results of the International Multicenter Angina Exercise (IMAGE) Study. J	Follow-up 6 weeks

Am Coll Cardiol. 1995; 25(7):1516-1521.	
Midtbo K, Molstad P, AMSA study group (. Amlodipine versus slow release metoprolol in the treatment of stable exertional angina pectoris (AMSA). Scand Cardiovasc J. 2000; 34(5):475-479.	Follow-up 8 weeks
Hopkinson ND, Hui KP, Smith MP et al. A comparison of sustained release verapamil versus atenolol for 24 h protection from exercise-induced angina pectoris. Eur Heart J. 1991; 12(12):1273-1277.	Follow-up 4 weeks
de Vries R, van den Heuvel A, Lok DJA et al. Nifedipine gastrointestinal therapeutic system versus atenolol in stable angina pectoris. Int J Cardiol. 1996; 57(2):143-150.	Follow-up 4 weeks
Frishman WH, Klein NA, Sherwood LM. Influence of calcium channel blockers and beta adrenergic blockers on parathyroid hormone secretion in normocalcemic patients with angina pectoris (abstract). Clin Res. 1982; 30(2):392A.	abstract
de Divitiis O, Liguori V, Di SS et al. Bisoprolol in the treatment of angina pectoris: a double blind comparison with verapamil. Eur Heart J. 1987; 8(Suppl M):43-54.	Follow-up 8 weeks
Antaloczy Z, Kekes E. Antianginal effects of atenolol and pindolol in patients with stable effort angina pectoris. Acta Pharmacologica Sinica. 1989; 10(3):222-226.	BB vs. BB
Ardissino D, Savonitto S, Egstrup K et al. Transient myocardial ischemia during daily life in rest and exertional angina pectoris and comparison of effectiveness of metoprolol versus nifedipine. Am J Cardiol. 1991; 67(11):946-952.	Patients with mixed angina
de Ponti C, Mauri F, Fiorista F. Efficacy of nifedipine on exercise tolerance in patients with angina pectoris. Comparison with propranolol and isosorbide dinitrate. G Ital Cardiol. 1977; 7(12):1162-1171.	Non-English paper
Parodi O, Simonetti I, L'Abbate A et al. Verapamil versus propranolol for angina at	review

rest. Am J Cardiol. 1982; 50(4):923-928.	
Winniford MD, Markham J, Firth BG. Hemodynamic and electrophysiologic effects of verapamil and nifedipine in patients on propranolol. Am J Cardiol. 1982; 50(4):704-710.	Outcome outside remit (hemodynamic and electro physiologic effects of drugs)
O'Hara MJ, Khurmi NS, Bowles MJ et al. Comparison of diltiazem at two dose levels with propranolol for treatment of stable angina pectoris. Am J Cardiol. 1984; 54(6):477-481.	Follow-up 4 weeks
Wallace WA, Wellington KL, Chess MA et al. Comparison of nifedipine gastrointestinal therapeutic system and atenolol on antianginal efficacies and exercise hemodynamic responses in stable angina pectoris. Am J Cardiol. 1994; 73(1):23-28.	Results reported graphically.
Shapiro W, Narahara KA, Kostis JB et al. Comparison of atenolol and nifedipine in chronic stable angina pectoris. Am J Cardiol. 1989; 64(3):186-190.	N=39 (parallel group design)
Arnman K, Ryden L. Comparison of metoprolol and verapamil in the treatment of angina pectoris. Am J Cardiol. 1982; 49(4):821-827.	N=20
Hansen JF, Grytter C, Thomsen S et al. Verapamil and beta-adrenoceptor blockade in the treatment of stable angina pectoris. Clin Exp Pharmacol Physiol. 1982; 9(Suppl.6):31-41.	Median values reported. Cannot be analysed.
Dwivedi SK, Saran RK, Mittal S et al. Silent ischemic interval on exercise test is a predictor of response to drug therapy: a randomized crossover trial of metoprolol versus diltiazem in stable angina. Clin Cardiol. 2001; 24(1):45-49.-	Follow-up 6 weeks. Outcome outside remit: role of silent ischemic interval on ETT as a predictor of response to therapy. Patients divided on basis of ETT.
Cocco G, Strozzi D, Chu D. Therapeutic effects of pindolol and nifedipine in patients with stable angina pectoris and asymptomatic resting ischemia. Br J Clin Pract. 1980; 34(Suppl. 8):59-65.	Follow-up 45 days
Merino A, Alegria E, Castello R et al. Complementary mechanisms of atenolol and diltiazem in the clinical improvement of	Follow-up 1 week; n=18

patients with stable angina. Angiology. 1989; 40(7):626-632.	
Higginbotham MB, Morris KG, Coleman RE et al. Chronic stable angina monotherapy. Nifedipine versus propranolol. Am J Med. 1989; 86(1 A):1-5.	Results reported graphically; n=21
Hasan M, Kumar N, Puri VK et al. Open randomised cross over trial comparison of diltiazem with verapamil in stable angina of effort (abstract). Indian Heart J. 1986; 38(5):330.	abstract
Hains ADB, Rodrignes EA, Whittington JR et al. Comparison of nisoldipine, metoprolol and the combination in stable angina pectoris. Australian & New Zealand Journal of Medicine. 1987; 17:596.	Abstract
Bramschreiber JK, Skalland ML, Strauss WE et al. Effects of diltiazem and propranolol alone and in combination in patients with stable angina (abstract). International Journal of Clinical Pharmacology & Therapeutics. 1985; 37(2):184.	Abstract
de Vries R, Dunselman PHJM. Monotherapy with nifedipine GITS compared with atenolol in stable angina pectoris. Br J Clin Pract. 1997; 51(Suppl 88):6-9.	Follow-up 4 weeks
de Oliveira JM. Comparative effects of verapamil and propranolol in patients with angina pectoris. Arq Bras Cardiol. 1978; 31(Suppl 1):45-50.	N=20; Follow-up 40 days

COMBINATION (BB,CCB)

Included studies

Study
Dargie HJ, Ford I, Fox KM. Total Ischaemic Burden European Trial (TIBET). Effects of ischaemia and treatment with atenolol, nifedipine SR and their combination on outcome in patients with chronic stable angina. The TIBET Study Group. *Eur Heart J*. 1996; 17(1):104-112.
O'Hara MJ, Khurmi NS, Bowles MJ et al. Diltiazem and propranolol combination for the treatment of chronic stable angina pectoris. *Clin Cardiol*. 1987; 10(2):115-123.
Pehrsson SK, Ringqvist I, Ekdahl S et al. Monotherapy with amlodipine or

atenolol versus their combination in stable angina pectoris. *Clin Cardiol*. 2000; 23(10):763-770.
Tweddel AC, Beattie JM, Murray RG et al. The combination of nifedipine and propranolol in the management of patients with angina pectoris. *Br J Clin Pharmacol*. 1981; 12(2):229-233.
Kawanishi DT, Reid CL, Morrison EC et al. (1992) Response of angina and ischemia to long-term treatment in patients with chronic stable angina: a double-blind randomized individualized dosing trial of nifedipine, propranolol and their combination. *Journal of the American College of Cardiology* 19 (2): 409-17.
Savonitto S, Ardissiono D, Egstrup K et al. (1996) Combination therapy with metoprolol and nifedipine versus monotherapy in patients with stable angina pectoris. Results of the International Multicenter Angina Exercise (IMAGE) Study. *Journal of the American College of Cardiology* 27 (2): 311-6.

Excluded studies

Study	Reasons for exclusion
Strauss WE, Parisi AF. Superiority of combined diltiazem and propranolol therapy for angina pectoris. *Circulation*. 1985; 71(5):951-957.	Values not reported for relevant outcomes
Kenny J, Kiff P, Holmes J et al. Beneficial effects of diltiazem and propranolol, alone and in combination, in patients with stable angina pectoris. *Br Heart J*. 1985; 53(1):43-46.	N=15; follow-up 4 weeks
Hung J, Lamb IH, Connolly SJ et al. The effect of diltiazem and propranolol, alone and in combination, on exercise performance and left ventricular function in patients with stable effort angina: a double-blind, randomized, and placebo-controlled study. *Circulation*. 1983; 68(3):560-567.	N=12
Bassan MB, Weiler RD, Shalev O. The additive antianginal action of oral nifedipine in patients receiving propranolol: magnitude and duration of effect. *Circulation*. 1982;	N=10; follow-up 2 days

66(4):710-716.	
Lynch P, Dargie H, Krikler S et al. Objective assessment of antianginal treatment: a double-blind comparison of propranolol, nifedipine, and their combination. *Br Med J*. 1980; 281(6234):184-187.	N=16; results of outcomes reported in graphs
Livesley B, Catley PF, Campbell RC et al. Double-blind evaluation of verapamil, propranolol, and isosorbide dinitrate against a placebo in the treatment of angina pectoris. *Br Med J*. 1973; 1(5850):375-378.	Actual values of results not reported (only p-values)
Bassan MB. The combined use of calcium-channel blockers and beta blockers in the treatment of angina pectoris. *Practical Cardiology*. 1985; 11(11):55-65.	N=10; follow-up 4 days
Crake T, Quyyumi AA, Wright C et al. Treatment of angina pectoris with nifedipine: A double blind comparison of nifedipine and slow-release nifedipine alone and in combination with atenolol. *Br Heart J*. 1987; 58(6):617-620.	N=10; follow-up 2 weeks
Dargie HJ. Combination therapy with beta-adrenoceptor blockers and calcium antagonists. *Br J Clin Pharmacol*. 1986; 21(Suppl 2):155S-160S.	Review. Relevant references identified.
Fox KM, Jonathan A, Selwyn AP. The use of propranolol and nifedipine in the medical management of angina pectoris. *Clin Cardiol*. 1981; 4(3):125-129.	Non RCT
Leon MB. Combination therapy using calcium channel blockers and beta blockers in patients with chronic stable angina pectoris. *Vasc Med*. 1983; 1(1):16-25.	Review. References identified.
McGourty JC, Silas JH, Solomon SA. Tolerability of combined treatment with verapamil and beta-blockers in	Non RCT

angina resistant to monotherapy. *Postgrad Med J*. 1985; 61(713):229-232.	
Leon MB. Combination therapy using calcium-channel blockers and beta blockers in patients with chronic stable angina pectoris. *Cardiovascular Reviews & Reports*. 1983; 4(2):171-177.	Review – relevant references identified.
Dunselman P, Liem AH, Verdel G et al. Addition of felodipine to metoprolol vs replacement of metoprolol by felodipine in patients with angina pectoris despite adequate beta-blockade. Results of the Felodipine ER and Metoprolol CR in Angina (FEMINA) Study. *Eur Heart J*. 1997; 18(11):1755-1764.	Follow-up 5 weeks
Fox KM, Mulcahy D, Findlay I et al. The Total Ischaemic Burden European Trial (TIBET). Effects of atenolol, nifedipine SR and their combination on the exercise test and the total ischaemic burden in 608 patients with stable angina. The TIBET Study Group. *Eur Heart J*. 1996; 17(1):96-103.	Follow-up 6 weeks
el-Tamimi H, Davies GJ. Optimal control of myocardial ischaemia: the benefit of a fixed combination of atenolol and nifedipine in patients with chronic stable angina. *Br Heart J*. 1992; 68(8):291-295.	Follow-up 3 weeks
Egstrup K. Effects of metoprolol, nifedipine and their combination on total ischemic activity in effort and mixed angina. A randomized double-blind study. American Journal of Noninvasive Cardiology. 1989; 3(5):290-296.	N=16
Subramanian VB, Bowles MJ, Davies AB et al. Combined therapy with verapamil and propranolol in chronic stable angina. Am J Cardiol. 1982; 49(1):125-132.	N=22

Choong C, Roubin, G. et al. Acute effects of nifedipine and combination with metoprolol on exercise capacity, haemodynamics and left ventricular function in patients with exertional angina (abstract). Australian & New Zealand Journal of Medicine. 1983; 13:417.	Abstract
Nelson GI, Silke B, Ahuja RC et al. The effect on left ventricular performance of nifedipine and metoprolol singly and together in exercise-induced angina pectoris. Eur Heart J. 1984; 5(1):67-79.	Sublingual nifedipine vs. intravenous metaprolol
de Ponti C, De Biase AM, Pirelli S et al. Effects of nifedipine, acebutolol, and their association on exercise tolerance in patients with effort angina. Cardiology. 1981; 68(Suppl 2):195-199.	N=16
Crawford MH, Miller WE, O'Rourke RA et al. Combination nadolol and diltiazem for severe angina pectoris. Cardiology Board Review. 1989; 6(9):-25.	N=18
Belanger LG, Charbonneau M, Lavallee JP. Treatment of stable angina pectoris with calcium antagonists alone or combined with beta-blocking agents: A review of the literature. Can J Cardiol. 1986; 2(4):212-217.	Review
Santamaria F, Sestito M, Lirato C et al. Acute effects of propranolol and its combination with nifedipine in elderly patients with effort stable angina. A double blind, randomized, cross-over, placebo-controlled study. Minerva Cardioangiol. 1993; 41(4):139-145.	Non English paper
Tirlapur VG, Mir MA. Cardiorespiratory effects of isosorbide dinitrate and nifedipine in combination with nadolol: a double-blind comparative study of	N=19

beneficial and adverse antianginal drug interactions. Am J Cardiol. 1984; 53(4):487-492.	
Emanuelsson H, Egstrup K, Nikus K et al. Antianginal efficacy of the combination of felodipine-metoprolol 10/100 mg compared with each drug alone in patients with stable effort-induced angina pectoris: A multicenter parallel group study. Am Heart J. 1999; 137(5):854-862.	Follow-up 4 weeks
Uusitalo A, Arstila M, Bae EA et al. Metoprolol, nifedipine, and the combination in stable effort angina pectoris. Am J Cardiol. 1986; 57(10):733-737.	Follow-up 7 weeks
Frishman WH, Glasser S, Stone P et al. Comparison of controlled-onset, extended-release verapamil with amlodipine and amlodipine plus atenolol on exercise performance and ambulatory ischemia in patients with chronic stable angina pectoris. Am J Cardiol. 1999; 83(4):507-514.	Follow-up 4 weeks
Winniford MD, Fulton KL, Corbett JR et al. Propranolol-verapamil versus propranolol-nifedipine in severe angina pectoris of effort: a randomized, double-blind, crossover study. Am J Cardiol. 1985; 55(4):281-285.	N=16
Johnston DL, Lesoway R, Humen DP et al. Clinical and hemodynamic evaluation of propranolol in combination with verapamil, nifedipine and diltiazem in exertional angina pectoris: a placebo-controlled, double-blind, randomized, crossover study. Am J Cardiol. 1985; 55(6):680-687.	Results reported graphically (anginal attacks, ST-depression)
Leon MB, Rosing DR, Bonow RO. Clinical efficacy of verapamil alone and combined with propranolol in treating patients with chronic stable angina pectoris. Am J Cardiol.	N=11

1981; 48(1):131-139.	
Morse JR. Comparison of combination nifedipine-propranolol and diltiazem-propranolol with high dose diltiazem monotherapy for stable angina pectoris. Am J Cardiol. 1988; 62(16):1028-1032.	N=20; Results reported graphically.
Toal CB, Motro M, Baird MG et al. Effectiveness of nifedipine GITS in combination with atenolol in chronic stable angina. *Can J Cardiol*. 1999; 15(10):1103-1109.	Follow-up 4 weeks
Aberg J, Allam S, Arstilla M et al. (1992) The Total Ischemic Burden European Trial (TIBET): Design, methodology, and management. Cardiovascular Drugs & Therapy 6 (4): 379-86.	Methodology paper
Ekelund LG, Oro L (1979) Antianginal efficiency of nifedipine with and without a beta-blocker, studied with exercise test. A double-blind, randomized subacute study. *Clinical Cardiology* 2 (3): 203-11.	N=21
Lai C, Onnis E, Pirisi R et al. (1988) Anti-ischaemic and anti-anginal activity of atenolol, nifedipine and their combination in stable, chronic effort angina. *Drugs Under Experimental & Clinical Research* 14 (11): 699-705.	N=10
Lessem J (1984) Combined therapy with Ca-antagonists and beta-adrenergic receptor blocking agents in chronic stable angina. *Acta Medica Scandinavica.Supplementum* 681: 83-90.	N=18

Lai C, Onnis E, Orani E et al. (1992) Felodipine improves the anti-ischaemic effect of metoprolol in stable effort-induced angina. *Drug Investigation* 4 (1): 30-3.	Follow-up 7 days
Knight CJ, Fox KM (1998) Amlodipine versus diltiazem as additional antianginal treatment to atenolol. Centralised European Studies in Angina Research (CESAR) Investigators. *American Journal of Cardiology* 81 (2): 133-6.	Follow-up 4 weeks
Dunselman PH, van Kempen LH, Bouwens LH et al. (1998) Value of the addition of amlodipine to atenolol in patients with angina pectoris despite adequate beta blockade. *American Journal of Cardiology* 81 (2): 128-32.	Follow-up 8 weeks
Braun S, Terdiman R, Berenfeld D et al. (1985) Clinical and hemodynamic effects of combined propranolol and nifedipine therapy versus propranolol alone in patients with angina pectoris. *American Heart Journal* 109 (3 I): 478-85.	Follow-up 4 weeks; n=20
Silber S, Vogler A, Theisen K (1986) Equal anti-ischemic properties of isosorbide dinitrate plus verapamil and isosorbide dinitrate plus propranolol. A randomized, double-blind and crossover study. *Zeitschrift fur Kardiologie 75* (Suppl 3): 100-5.	Follow-up 3 weeks
Raftery EB (1985) Calcium blockers and beta blockers: Alone and in combination. *Acta Medica Scandinavica* 217 (Suppl 694): 188-96.	N=22
Jackson G (2001) Combination	Review

therapy in angina: a review of combined haemodynamic treatment and the role for combined haemodynamic and cardiac metabolic agents. *International Journal of Clinical Practice* 55 (4): 256-61.	
Dorow P, Schiess W (1982) The effect of isosorbide dinitrate, pindolol and their combination on ST-segment depression during exercise in patients with coronary heart disease. *Herz Kreislauf* 14 (6): 329-34.	Non English paper
Leon MB, Rosing DR, Bonow RO et al. (1985) Combination therapy with calcium-channel blockers and beta blockers for chronic stable angina pectoris. *American Journal of Cardiology* 55 (3): 69B-80B.	Review
Broustet JP, Rumeau P, Guern P (1980) Comparison of the combination of nifedipine and atenolol with the combination of nitroglycerine and atenolol in patients with angina pectoris. *European Heart Journal* 1 (Suppl B): 59-64.	Follow-up 12 hrs (for exercise test)
Daly K, Bergman G, Rothman M (1982) Beneficial effect of adding nifedipine to beta-adrenergic blocking therapy in angina pectoris. *European Heart Journal* 3 (1): 42-6.	Sublingual nifedipine
Egstrup K (1988) Randomized double-blind comparison of metoprolol, nifedipine, and their combination in chronic stable angina: effects on total ischemic activity and heart rate at onset of ischemia. *American Heart Journal* 116 (4): 971-8.	Follow-up 2 weeks
Ankier SI, Fay L, Warrington SJ et al. (1989) A multicentre open comparison of isosorbide-5-mononitrate and nifedipine given prophylactically to general practice	Follow-up 4 weeks

patients with chronic stable angina pectoris. *Journal of International Medical Research* 17 (2): 172-8.	
Ferguson JD, Ormerod O, Lenox SA (2000) Bisoprolol alone and in combination with amlodipine or nifedipine in the treatment of chronic stable angina. *International Journal of Clinical Practice* 54 (6): 360-3.	Follow-up 4 weeks
Emanuelsson H, Ahlström P, Kujacic V et al. (1994) Felodipine versus placebo in stable effort-induced angina pectoris in patients inadequately controlled with metoprolol--a dose-finding study. *Journal of Cardiovascular Pharmacology* 24 (2): 303-9.	Follow-up 9 weeks
Humen DP, O'Brien P, Purves P (1986) Effort angina with adequate beta-receptor blockade: Comparison with diltiazem alone and in combination. *Journal of the American College of Cardiology* 7 (2): 329-35.	Follow-up 4 weeks
Winniford MD, Huxley RL, Hillis LD (1983) Randomized, double-blind comparison of propranolol alone and a propranolol-verapamil combination in patients with severe angina of effort. *Journal of the American College of Cardiology* 1 (2:Pt 1): 492-8.	N=13
Steffensen R, Grande P, Pedersen F et al. (1993) Effects of atenolol and diltiazem on exercise tolerance and ambulatory ischaemia. *International Journal of Cardiology* 40 (2): 143-53.	Follow-up 6 weeks
Egstrup K (1987) Effects of metoprolol, nifedipine and combination on total ischaemic burden in effort and mixed angina. *Annals of Clinical Research* 19 (6): 422.	Abstract
Rees-Jones DI, Oliver IM (1994) A comparison of the antianginal	Follow-up 3 weeks

efficacy of nifedipine alone and the fixed combination of atenolol and nifedipine. *British Journal of Clinical Practice* 48 (4): 174-7.	
O'Hara MJ, Khurmi NS, Bowles MJ et al. (1984) Combined diltiazem and propranolol therapy for the treatment of stable angina pectoris (abstract). *British Journal of Clinical Pharmacology* 17: 211P-3P.	Abstract
Sandberg M, Foale RA (1988) Atenolol with and without nifedipine in the treatment of angina pectoris. Preliminary report. *Drugs* 35 (Suppl 4): 51-5.	Results reported in graphs.
Foale RA (1993) Atenolol versus the fixed combination of atenolol and nifedipine in stable angina pectoris. *European Heart Journal* 14 (10): 1369-74.	Follow-up 4 weeks
Lagioia R, Scrutinio D, Ricci A et al. (1995) Comparison of a fixed combination of nifedipine slow release and atenolol (BAY-R-1999) and nifedipine slow release alone in patients with stable angina pectoris: A multicenter, randomized, double-blind, parallel-group study. *Current Therapeutic Research Clinical & Experimental* 56 (11): 1175-84.	Follow-up 4 weeks
Amsterdam EA, Carmichael F, Dressendorfer RH et al. (1982) Comparative and combined quantitative effects of nitroglycerin, propranolol and exercise training on exertional capacity in patients with angina (abstract). *American Journal of Cardiology* 49 (4 II): 1000.	Abstract
Mantovani, Santoro BA. Comparison between diltiazem 360 mg/die and propanolol 240 mg/die in stress stable angina. G Ital Cardiol. 1986; 16(Suppl 1):78.	Non English abstract
Saul PA, Oliver IM, Russell WA. Tolerance and long-term efficacy of	Open-label study. Results in

a fixed combination of atenolol and nifedipine in the treatment of angina pectoris. Br J Clin Pract. 1992; 46(4):234-237.	graphs.
Poole-Wilson PA, Lubsen J, Kirwan B et al. Effect of long-acting nifedipine on mortality and cardiovascular morbidity in patients with stable angina requiring treatment (ACTION trial): randomised controlled trial. Lancet. 2004; 364(9437):849-857.	
Klein WW, Jackson G, Tavazzi L. Efficacy of monotherapy compared with combined antianginal drugs in the treatment of chronic stable angina pectoris: a meta-analysis. *Coron Artery Dis*. 2002; 13(8):427-436.	Meta analysis – relevant references noted

ADDING NITRATES

Included studies

Study
Morse JR, Nesto RW (1985) Double-blind crossover comparison of the antianginal effects of nifedipine and isosorbide dinitrate in patients with exertional angina receiving propranolol. *Journal of the American College of Cardiology* 6 (6): 1395-401.
de Vries RJ, Dunselman PH, van Veldhuisen DJ et al. Comparison between felodipine and isosorbide mononitrate as adjunct to beta blockade in patients > 65 years of age with angina pectoris. Am J Cardiol. 1994; 74(12):1201-1206.

Excluded studies

Study	Reasons for exclusion
Battock DJ, Alvarez H, Chidsey CA. Effects of propranolol and isosorbide dinitrate on exercise performance and adrenergic acitivity in patients with angina pectoris. *Circulation*. 1969; 39(2):157-169.	N=12
Schroeder JS, Beier SL, Ginsburg R et al. Efficacy of diltiazem for medically refractory stable angina: long-term follow-up. *Clin Cardiol*. 1985; 8(9):480-	Non RCT

485.	
Nesto RW, White HD, Wynne J et al. Comparison of nifedipine and isosorbide dinitrate when added to maximal propranolol therapy in stable angina pectoris. Am J Cardiol. 1987; 60(4):256-261.	N=14
Nesto RW, White HD, Wynne J et al. Comparison of nifedipine and isosorbide dinitrate when added to maximal propranolol therapy in stable angina pectoris. Am J Cardiol. 1987; 60(4):256-261.	Poster abstract
Blasini R, Brugmann U, Reiniger G et al. Long-term treatment of exercise-induced angina pectoris with once- daily administration of 120 mg isosorbide dinitrate in sustained- release form. Comparison of monotherapy and combined therapy with atenolol and nifedipine. Herz. 1985; 10(3):163-17	Non English paper
Humen DP, Kostuk WJ. Clinical response and effects on left ventricular function of isosorbide dinitrate added to propranolol or diltiazem monotherapy in patients with chronic stable angina. Can J Cardiol. 1991; 7(2):74-80.	Follow-up 6 weeks (3 weeks of drug therapy)
Liang CS, Coplin B, Wellington K. Comparison of antianginal efficacy of nifedipine and isosorbide dinitrate in chronic stable angina: a long-term, randomized, double-blind, crossover study. Am J Cardiol. 1985; 55(12):9E-14E.	CCB vs. nitrates
Akhras F, Jackson G (1991) Efficacy of nifedipine and isosorbide mononitrate in combination with atenolol in stable angina. *Lancet* 338 (8774): 1036-9.	N=18; Follow-up 4 weeks.
Akhras F, Chambers J, Jefferies S et al. (1989) A randomised double-blind crossover study of isosorbide mononitrate and nifedipine retard in chronic stable angina. *International Journal of Cardiology* 24 (2): 191-6.	CCB vs. Nitrates

Aronow WS, Kaplan MA (1969) Evaluation of propranolol and of isosorbide dinitrate in angina pectoris. *Current Therapeutic Research - Clinical & Experimental* 11 (2): 80-6.	Follow-up 4 days
Chan PK, Heo JY, Garibian G et al. (1988) The role of nitrates, beta blockers, and calcium antagonists in stable angina pectoris. *American Heart Journal* 116 (3): 838-48.	Literature review
Crawford MH (1987) The role of triple therapy in patients with chronic stable angina pectoris. *Circulation 75* (6 II Suppl): V.	Review
de Ponti C, Mauri F, Ciliberto GR et al. (1979) Comparative effects of nifedipine, verapamil, isosorbide dinitrate and propranolol on exercise-induced angina pectoris. *European Journal of Cardiology* 10 (1): 47-58.	N=5
e Ponti C, Mauri F, Ciliberto GR et al. (1980) Comparative effects of nifedipine, verapamil, isosorbide dinitrate and propranolol on exercise-induced angina pectoris. *British Journal of Clinical Practice* 34 (Suppl 8): 53-8.	N=5
el-Tamimi H, Davies GJ, Kaski JC et al. (1989) Effects of diltiazem alone or with isosorbide dinitrate or with atenolol both acutely and chronically for stable angina pectoris. *American Journal of Cardiology* 64 (12): 717-24.	N=14; follow-up 18 days
Emanuelsson H, Ake H, Kristi M et al. (1989) Effects of diltiazem and isosorbide-5-mononitrate, alone and in combination, on patients with stable angina pectoris. *European Journal of Clinical Pharmacology* 36 (6): 561-6.	Follow-up 4 weeks
Freedman SB, Richmond DR, Kelly DT (1982) Long-term follow-up of verapamil and nitrate treatment for coronary artery spasm. *American Journal of Cardiology* 50 (4): 711-5.	Patients with coronary artery spasm.
Friedensohn A, Meshulam R, Schlesinger Z (1991) Randomized double-blind	Follow-up 6 weeks

comparison of the effects of isosorbide dinitrate retard, verapamil sustained-release, and their combination on myocardial ischemic episodes. *Cardiology* 79 (Suppl 2): 31-40.	
Hall R, Chong C (2001) A double-blind, parallel-group study of amlodipine versus long-acting nitrate in the management of elderly patients with stable angina. *Cardiology* 96 (2): 72-7.	CCB vs. nitrates
Heller GV, Sridharan M, Morse J et al. (1997) Antianginal response to once-daily diltiazem CD in patients receiving concomitant beta-blockers, long-acting nitrates, or both. *Pharmacotherapy* 17 (4): 760-6.	Follow-up 2 weeks
Koch G, Fransson L, Karlegard L (1987) Isosorbide-5-mononitrate versus nifedipine in ischemic heart disease with stable angina: Effects on exercise and angina tolerance, ST-segment depression, and hemodynamic response to exercise. *Current Therapeutic Research - Clinical and Experimental* 41 (4): 454-63.	N=21
Krepp HP (1991) Evaluation of the antianginal and anti-ischemic efficacy of slow-release isosorbide-5-mononitrate capsules, bupranolol and their combination, in patients with chronic stable angina pectoris. *Cardiology* 79 (Suppl 2): 14-8.	Follow-up 12 days
Li Y, Qi W, Fan W (1999) Comparative efficacy of nifedipine gastrointestinal therapeutic system versus isosorbide mononitrate in patients with stable angina pectoris. *Chinese Journal of Cardiology* 27 (4): 283-5.	Paper in Chinese.
Parker JD (1998) Clinical outcome studies of anti-anginal drug therapy for patients with stable coronary disease: an indication for clinical trials. *European Heart Journal* 19 (Suppl 1): I15-I19.	Literature review
Pellinen TJ, Lukkala K, Sundberg S et al. (1992) Efficacy of conventional and sustained-release verapamil in stable	N=20; follow-up 2 weeks.

angina pectoris. *Annals of Medicine* 24 (1): 49-53.	
Rizzon P, Lagioia R (1999) Comparison between anti-ischaemic efficacy and drug plasma levels: Amlodipine versus isosorbide-5-mononitrate trial. *European Heart Journal - Supplement* 1 (I): I18-I25.	CCB vs. Nitrates
Rubboli A, Pota G, Ricci E et al. (1994) Efficacy of controlled-release (Durules) isosorbide-5-mononitrate in association with calcium antagonists or beta-blockers in stable effort angina pectoris. *American Journal of Noninvasive Cardiology*. 8 (5): 300-5.	N=12; follow-up 2 weeks
Steffensen R, Melchior T, Bech J et al. (1997) Effects of amlodipine and isosorbide dinitrate on exercise-induced and ambulatory ischemia in patients with chronic stable angina pectoris. *Cardiovascular Drugs & Therapy* 11 (5): 629-35.	10 weeks (5 weeks of each drugs)
Svendsen JH, Aldershvile J, Abildgaard U et al. (1987) Efficacy of isosorbide-5-mononitrate and lack of cross - tolerance to nitroglycerin in angina pectoris patients (abstract). *Annals of Clinical Research* 19 (6): 421.	Abstract
Tirlapur VG, Mir MA (1983) A comparison of nifedipine and isosorbide dinitrate in angina pectoris with particular reference to arterial oxygen saturation. *Postgraduate Medical Journal* 59 (Suppl 2): 30-4.	N=19
Tirlapur VG, Mir MA (1983b) Cardiorespiatory effects of isosorbide dinitrate and nifedipine in combination with a long acting beta-adrenoceptor blocker in angina pectoris (abstract). *Clin Sci Suppl* 64: 7.	N=19
Uberbacher HJ, Patyna WD, Krepp HP et al. (1991) Randomised double-blind comparison of isosorbide-5-mononitrate and sustained release nifedipine in patients with stable exercise-induced	Follow-up 1 week.

angina. *Drug Investigation* 3 (4): 210-9.	
Uusitalo A, Keyrilainen O, Harkonen R et al. (1988) Anti-anginal efficacy of a controlled-release formulation of isosorbide-5-mononitrate once daily in angina patients on chronic beta-blockade. *Acta Medica Scandinavica* 223 (3): 219-25.	Follow-up 6 weeks
van de Ven LL, Brouwer J, Portegies M et al. (1993) Effect and safety of bisoprolol (Emcor (R)) and isosorbidedinitrate in the treatment of angina pectoris. *Tijdschrift voor Therapie Geneesmiddel en Onderzoek* 18 (5): 138-41.	Non English paper
van de Ven LL, Vermeulen A, Tans JGM et al. (1995) Which drug to choose for stable angina pectoris: A comparative study between bisoprolol and nitrates. *International Journal of Cardiology* 47 (3): 217-23.	BB vs. nitrates
Vlay SC, Olson LC (1990) Nifedipine and isosorbide dinitrate alone and in combination for patients with chronic stable angina: a double-blind crossover study. *American Heart Journal* 120 (2): 303-7.	N=18
Walker JM, Curry PV, Bailey AE et al. (1996) A comparison of nifedipine once daily (Adalat LA), isosorbide mononitrate once daily, and isosorbide dinitrate twice daily in patients with chronic stable angina. *International Journal of Cardiology* 53 (2): 117-26.	Nitrates vs. CCB
Zetterquist S, Furberg C, Ringqvist I et al. (1975) Separate and combined effects of pindolol and isosorbide dinitrate in standardized exercise tests of patients with angina pectoris. *Current Therapeutic Research - Clinical & Experimental* 17 (2): 139-48.	Outcomes 90 mins after administration of the drug. Tests performed at an interval of 1-2 days. N=24
Waysbort J, Meshulam N, Brunner D (1991) Isosorbide-5-mononitrate and atenolol in the treatment of stable exertional angina. *Cardiology* 79 (Suppl	Outcomes outside remit (heart rate, blood pressure)

2): 19-26.	
Goldbarg AN, Morgan JF, Butterfield TK et al. Therapy of angina pectoris with propranolol and long-acting nitrates. *Circulation*. 1969; 40(6):847-853.	N=21
Alexander JC, Christie MH, Vernam KA et al. Long-term experience with nadolol in treatment of hypertension and angina pectoris. Am Heart J. 1984; 108(4:Pt 2):1136-1140.	Non RCT
Schulz W, Jost S, Kober G et al. Relation of antianginal efficacy of nifedipine to degree of coronary arterial narrowing and to presence of coronary collateral vessels. Am J Cardiol. 1985; 55(1):26-32.	Outcome outside remit
Guiney TE, Daoud ZF, Ginks WR et al. Comparison of the effect of nifedipine and isosorbide dinitrate of exercise tolerance in patients with angina pectoris (abstract). Circulation. 1980; 62(4 II)	Abstract
Elliott HL, Meredith P. J Hypertens. 2010; Conference(var.pagings):e286.	Abstract
Meredith PA, Elliott HL. Diabetologia. 2009; Conference(var.pagings):S26.	Abstract
Ky B, Kirwan BA, de Brouwer S et al. Gender differences in cardiac remodeling and clinical outcomes in chronic stable angina pectoris (from the ACTION Trial). *Am J Cardiol*. 2010; 105(7):943-947.	Not relevant to the clinical question

ADDITION OF CCB TO BASIC REGIMEN

Included studies

Study
Poole-Wilson PA, Lubsen J, Kirwan B et al. Effect of long-acting nifedipine on mortality and cardiovascular morbidity in patients with stable angina requiring treatment (ACTION trial): randomised controlled trial. Lancet. 2004; 364(9437):849-857.

NICORANDIL

Included studies

Study
Dargie HJ. Effect of nicorandil on coronary events in patients with stable angina: The Impact Of Nicorandil in Angina (IONA) randomised trial. *Lancet*. 2002; 359(9314):1269-1275.
IONA Study Group. Impact of nicorandil in angina: subgroup analyses. Heart. 2004; 90(12):1427-1430.
Zhu WL, Shan YD, Guo JX et al. Double-blind, multicenter, active-controlled, randomized clinical trial to assess the safety and efficacy of orally administered nicorandil in patients with stable angina pectoris in China. *Circulation Journal*. 2007; 71(6):826-833.
Doring G. Antianginal and anti-ischemic efficacy of nicorandil in comparison with isosorbide-5-mononitrate and isosorbiddinitrate results from two multicenter, double-blind, randomized studies with stable coronary heart disease patients. *J Cardiovasc Pharmacol*. 1992; 20(Suppl 3):S74-S81.
Chatterjee T, Fleisch M, Meier B et al. Comparison of the antiischaemic and antianginal effects of nicorandil and amlodipine in patients with symptomatic stable angina pectoris: The SWAN study. *Journal of Clinical & Basic Cardiology*. 1999; 2(2):213-217.
Guermonprez JL, Blin P, Peterlongo F. A double-blind comparison of the long-term efficacy of a potassium channel opener and a calcium antagonist in stable angina pectoris. *Eur Heart J*. 1993; 14(Suppl B):30-34.
Meeter K, Kelder JC, Tijssen JG et al. Efficacy of nicorandil versus propranolol in mild stable angina pectoris of effort: a long-term, double-blind, randomized study. *J Cardiovasc Pharmacol*. 1992; 20(Suppl 3):S59-S66.
Ulvenstam G, Diderholm E, Frithz G et al. Antianginal and anti-ischemic efficacy of nicorandil compared with nifedipine in patients with angina pectoris and coronary heart disease: a double-blind, randomized, multicenter study. *J Cardiovasc Pharmacol*. 1992; 20 Suppl 3:S67-S73.

Excluded Studies

Study	Reason for exclusion
Markham A, Plosker GL, Goa KL. Nicorandil: An updated review of its use in ischaemic heart disease with emphasis on its cardioprotective effects. *Drugs*. 2000; 60(4):955-974.	Review of effects of Nicorandil in Myocardial infarction and stable angina (relevant study references noted and included separately)
Anon. Erratum: Effect of nicorandil on coronary events in patients with stable angina: The Impact Of Nicorandil In Angina (IONA) randomised trial. *Lancet*. 2002; 360(9335):806.	Only reference- reports error in the article on the IONA study
IONA Study Group. Trial to show the impact of nicorandil in angina (IONA): design, methodology, and management. *Heart*. 2001; 85(6):E9.	Design and methodology – No results reported
Udaykumar P, Adhikari P, Periera P. Safety and efficacy of nicorandil in chronic stable angina - a double blind comparative randomised trial with isosorbide mononitrate. *Journal of Indian Academy of Clinical Medicine*. 2003; 4(3):205-209.	Participants <100 (n=20)
Odajima H. Dose Response Study of Nicorandil (SG-75) on Angina Pectoris: Double Blind Comparative Trial. *Yakuri to Chiryo (Japanese Pharmacology and Therapeutics)*. 1982; 10(2):831-844.	Paper in Chinese
Kato K, Asanoi H, Wakabayashi C et al. Effect of nicorandil on exercise performance in patients with effort angina: a multicenter trial using a treadmill exercise test. *J Cardiovasc Pharmacol*. 1987; 10(Suppl 8):S98-103.	Participants <100 (n=29)
Anon. Nicorandil: Anal ulcerations an additional concern. *Prescrire Int*. 2006; 15(81)	Case series
Biggins J, Barrow E, Watson AJ. Non-healing anal ulcers associated with nicorandil. *J Wound Care*. 2006;	Case series

15(5):197-198.	
Kishi K, Hiasa Y, Tanaka H et al. Effects of nicorandil on exercise tolerance in patients with angina pectoris at a single administration. It's relationship to plasma concentration; a double blind study. *Therapeutic Research*. 1995; 16(4):154-158.	Paper in Chinese
Ferguson C, McKay G, Fisher M. Nicorandil. *Practical Diabetes International*. 2009; 26(2):78-79	Review (relevant study references noted and included)
Witchitz S, Darmon JY. Nicorandil safety in the long-term treatment of coronary heart disease. *Cardiovascular Drugs & Therapy*. 1995; 9(Suppl 2):237-243.	Open prospective study
Hiasa Y, Hamai K, Wada T et al. Chronic effects of nicorandil on exercise tolerance in patients with stable effort angina pectoris. *Tokushima J Exp Med*. 1989; 36(3-4):65-70.	Participants <100 (n=10)
Ciampricotti R, Schotborgh CE. A comparison of nicorandil with isosorbide mononitrate in elderly patients with stable coronary heart disease: the SNAPE study. *Am Heart J*. 2000; 139(5):e1-e9.	Full text not available (including results table)
Chatterjee T, Fleisch M, Doring G et al. Double-blind comparison of antianginous and antiischaemic effect of Nicorandil and Amlopidin in patients with stable angina pectoris (SWAN-study). *Schweizerische Medizinische Wochenschrift*. 1997; 127(Suppl 85):53	Abstract in German.
Meany TB, Richardson P, Camm AJ et al. Exercise capacity after single and twice-daily doses of nicorandil in chronic stable angina pectoris. *Am J Cardiol*. 1989; 63(21):66J-70J.	Data cannot be analysed. Follow-up 2 weeks. N=46
Krumenacker M, Roland E. Clinical profile of nicorandil: an overview of its hemodynamic properties and	Review.

therapeutic efficacy. [Review] [39 refs]. *J Cardiovasc Pharmacol*. 1992; 20:Suppl-102.	

New Drugs

Included studies

STUDY
Borer JS, Fox K, Jaillon P et al. Antianginal and antiischemic effects of ivabradine, an I_f inhibitor, in stable angina: A randomized, double-blind, multicentered, placebo-controlled trial. *Circulation*. 2003; 107(6):817-823.
Rich MW, Crager M, McKay CR. Safety and efficacy of extended-release ranolazine in patients aged 70 years or older with chronic stable angina pectoris. *American Journal of Geriatric Cardiology*. 2007; 16(4):216-221.
Ruzyllo W, Tendera M, Ford I et al. Antianginal efficacy and safety of ivabradine compared with amlodipine in patients with stable effort angina pectoris: A 3-month randomised, double-blind, multicentre, noninferiority trial. *Drugs*. 2007; 67(3):393-405.
Timmis AD, Chaitman BR, Crager M. Effects of ranolazine on exercise tolerance and HbA_{1c} in patients with chronic angina and diabetes. *Eur Heart J*. 2006; 27(1):42-48.
Tardif JC, Ponikowski P, Kahan T et al. Efficacy of the I(f) current inhibitor ivabradine in patients with chronic stable angina receiving beta-blocker therapy: a 4-month, randomized, placebo-controlled trial. *Eur Heart J*. 2009; 30(5):540-548.
Chaitman BR, Pepine CJ, Parker JO et al. Effects of Ranolazine with Atenolol, Amlodipine, or Diltiazem on Exercise Tolerance and Angina Frequency in Patients with Severe Chronic Angina: A Randomized Controlled Trial. *Journal of the American Medical Association*. 2004; 291(3):309-316.
Stone PH, Gratsiansky NA, Blokhin A et al. Antianginal Efficacy of Ranolazine When Added to Treatment With Amlodipine. The ERICA (Efficacy of Ranolazine in Chronic Angina) Trial. *J Am Coll Cardiol*. 2006; 48(3):566-575.
Tardif JC, Ford I, Tendera M et al. Efficacy of ivabradine, a new selective I_f inhibitor, compared with atenolol in patients with chronic stable angina. Eur Heart J. 2005; 26(23):2529-2536.
Fox K, Ford I, Steg PG et al. Relationship between ivabradine treatment and cardiovascular outcomes in patients with stable coronary artery disease and left ventricular systolic dysfunction with limiting angina: a subgroup analysis of the randomized, controlled BEAUTIFUL trial. *Euroopean Heart Journal*. 2009; 30(19):2337-2345.

Excluded studies

STUDY	Reasons for exclusion
Marzilli, M. and Klein, W. W. Efficacy and tolerability of trimetazidine in stable angina: a meta-analysis of randomized, double-blind, controlled trials. (14)., 2003.	Trimetazidine
Canadian Agency for Drugs and Technologies in Health, Ngegwa S. Ranolazine (Ranexa (TM)) for chronic stable angina. Issues in Emerging Health Technologies. 2007; 99:1-6.	Report
Marazzi G, Wajngarten M, Vitale C et al. Effect of free fatty acid inhibition on silent and symptomatic myocardial ischemia in diabetic patients with coronary artery disease. Int J Cardiol. 2007; 120(1):79-84.	Trimetazidine
El-Kady T, El-Sabban K, Gabaly M et al. Effects of trimetazidine on myocardial perfusion and the contractile response of chronically dysfunctional myocardium in ischemic cardiomyopathy: A 24-month study. American Journal of Cardiovascular Drugs. 2005; 5(4):271-278.	Trimetazidine
Chazov EI, Lepakchin VK, Zharova EA et al. Trimetazidine in angina combination therapy - The TACT study: Trimetazidine versus conventional treatment in patients with stable angina pectoris in a randomized, placebo-controlled, multicenter study. Am J Ther. 2005; 12(1):35-42.	Trimetazidine
Makolkin VI, Osadchiy KK. Trimetazidine modified release in the treatment of stable angina: TRIUMPH Study. Clinical Drug Investigation. 2004; 24(12):731-738.	Trimetazidine
Koylan N, Bilge AK, Adalet K et al. Comparison of the effects of trimetazidine and diltiazem on exercise	Trimetazidine

performance in patients with coronary heart disease. The Turkish trimetazidine study (TTS). Acta Cardiol. 2004; 59(6):644-650.	
Ruzyllo W, Szwed H, Sadowski Z et al. Efficacy of trimetazidine in patients with recurrent angina: A subgroup analysis of the TRIMPOL II study. Current Medical Research & Opinion. 2004; 20(9):1447-1454.	Trimetazidine
Vitale C, Wajngaten M, Sposato B et al. Trimetazidine improves left ventricular function and quality of life in elderly patients with coronary artery disease. Eur Heart J. 2004; 25(20):1814-1821.	Trimetazidine
Kolbel F, Bada V. Trimetazidine in geriatric patients with stable angina pectoris: The tiger study. Int J Clin Pract. 2003; 57(10):867-870.	Trimetazidine
Manchanda SC. Treatment of stable angina with low dose diltiazem in combination with the metabolic agent trimetazidine. Int J Cardiol. 2003; 88(1):83-89.	Trimetazidine
Polodski L, Dec I, Wojnar R et al. Trimetazidine limits the effects of myocardial ischaemia during percutaneous coronary angioplasty. Current Medical Research & Opinion. 2002; 18(7):389-396.	Trimetazidine
Shlyakhto EV, Almazov VVA, Nifontov EM et al. Antianginal effects of trimetazidine and left ventricular function improvement in patients with stable angina pectoris. American Journal of Cardiovascular Drugs. 2002; 2(2):119-124.	Trimetazidine
Szwed H, Sadowski Z, Elikowski W et al. Combination treatment in stable effort angina using trimetazidine and metoprolol: Results of a randomized, double-blind, multicentre study (TRIMPOL II). Eur Heart J. 2001; 22(24):2267-2274.	Trimetazidine

Szwed H, Sadowski Z, Pachocki R et al. The antiischemic effects and tolerability of trimetazidine in coronary diabetic patients. A substudy from TRIMPOL-1. Cardiovascular Drugs & Therapy. 1999; 13(3):217-222.	Trimetazidine
Nalbantgil S, Altintig A, Yilmaz H et al. The effect of trimetazidine in the treatment of microvascular angina. International Journal of Angiology. 1999; 8(1):40-43.	Trimetazidine
Michaelides AP, Spiropoulos K, Dimopoulos K et al. Antianginal efficacy of the combination of trimetazidine-propranolol compared with isosorbide dinitrate-propranolol in patients with stable angina. Clinical Drug Investigation. 1997; 13(1):8-14.	Trimetazidine
Levy S. Combination therapy of trimetazidine with diltiazem in patients with coronary artery disease. Am J Cardiol. 1995; 76(6):12B-16B.	Trimetazidine
Jain D, Dasgupta P, Hughes LO et al. Ranolazine (RS-43285): A preliminary study of a new anti-anginal agent with selective effect on ischaemic myocardium. Eur J Clin Pharmacol. 1990; 38(2):111-114.	N=14;Follow-up 2 weeks
Borer JS, Heuzey JY. Characterization of the heart rate-lowering action of ivabradine, a selective I(f) current inhibitor. Am J Ther. 2008; 15(5):461-473.	Outcome- effect of drug on heart rate
Cesar LA, Mathias W, Jr., Armaganijan D et al. Trimetazidine to reverse ischemia in patients with class I or II angina: a randomized, double-blind, placebo-controlled dobutamine-atropine stress echocardiography study. Coron Artery Dis. 2007; 18(4):259-263.	Trimetazidine
Cesar LA, Gowdak LH, Mansur AP. The metabolic treatment of patients with coronary artery disease: effects on quality of life and effort angina. Curr	Review

Pharm Des. 2009; 15(8):841-849.	
Cocco G, Rousseau MF, Bouvy T et al. Effects of a new metabolic modulator, ranolazine, on exercise tolerance in angina pectoris patients treated with beta-blocker or diltiazem. J Cardiovasc Pharmacol. 1992; 20(1):131-138.	Follow-up 2.5-3 hours
Dalla-Volta S, Maraglino G, Della-Valentina P et al. Comparison of trimetazidine with nifedipine in effort angina: a double-blind, crossover study. Cardiovascular Drugs & Therapy. 1990; 4(Suppl 4):853-859.	Trimetazidine
Detry JM, Sellier P, Pennaforte S et al. Trimetazidine: a new concept in the treatment of angina. Comparison with propranolol in patients with stable angina. Trimetazidine European Multicenter Study Group. Br J Clin Pharmacol. 1994; 37(3):279-288.	Trimetazidine
Detry JM, Leclercq PJ. Trimetazidine European Multicenter Study versus propranolol in stable angina pectoris: contribution of Holter electrocardiographic ambulatory monitoring. Am J Cardiol. 1995; 76(6):8B-11B.	Trimetazidine
Grabczewska Z, Bialoszynski T, Szymanski P et al. The effect of trimetazidine added to maximal anti-ischemic therapy in patients with advanced coronary artery disease. Cardiology Journal. 2008; 15(4):344-350.	Trimetazidine
Leonardo F, Fragasso G, Rossetti E et al. Comparison of trimetazidine with atenolol in patients with syndrome X: effects on diastolic function and exercise tolerance. Cardiologia. 1999; 44(12):1065-1069.	Trimetazidine
Morrow DA, Scirica BM, Chaitman BR et al. Evaluation of the glycometabolic effects of ranolazine in patients with and without diabetes mellitus in the MERLIN-TIMI 36 randomized controlled trial. Circulation. 2009; 119(15):2032-	Participants with Acute Coronary Artery Syndrome.

2039.	
Spinler SA, Rees C. Review of prasugrel for the secondary prevention of atherothrombosis. Journal of Managed Care Pharmacy. 2009; 15(5):383-395.	Prasugel vs. Clopidogrel
Anon. Ivabradine for stable angina? Drug & Therapeutics Bulletin. 2008; 46(11):84-88.	Review
Murphy SA. Metabolic Efficiency With Ranolazine for Less Ischemia in NSTE-ACS (MERLIN TIMI 36). ACC Cardiosource Review Journal. 2007; 16(5):27.	Abstract
Ribeiro LW, Ribeiro JP, Stein R et al. Trimetazidine added to combined hemodynamic antianginal therapy in patients with type 2 diabetes: a randomized crossover trial. Am Heart J. 2007; 154(1):78-78e7.	Trimetazidine
Sellier P, Broustet JP. Assessment of anti-ischemic and antianginal effect at trough plasma concentration and safety to trimetazidine MR 35mg in patients with stable angina pectoris: A multicenter, double-blind, placebo-controlled study. American Journal of Cardiovascular Drugs. 2003; 3(5):361-369.	Trimetazidine
Manchanda SC, Krishnaswami S. Combination treatment with trimetazidine and diltiazem in stable angina pectoris. Heart. 1997; 78(4):353-357.	Trimetazidine
Wenger NK, Chaitman B, Vetrovec GW. Gender Comparison of Efficacy and Safety of Ranolazine for Chronic Angina Pectoris in Four Randomized Clinical Trials. Am J Cardiol. 2007; 99(1):11-18.	Review
Patel PD, Arora RR. Utility of ranolazine in chronic stable angina patients. Vascular Health & Risk Management. 2008; 4(4):819-824.	Review

Sisakian HS. Beneficial long-term effects of vastarel MR in patients with stable coronary artery disease developing left ventricular dysfunction. Heart & Metabolism. 2009;(42):25-28.	Trimetazidine
Bonello L, Sbragia P, Amabile N et al. Protective effect of an acute oral loading dose of trimetazidine on myocardial injury following percutaneous coronary intervention. Heart. 2007; 93(6):703-707.	Trimetazidine
Conti CR. Expanding the understanding of the treatment of chronic angina: A 21st century approach - Part II. Clin Cardiol. 2008; 31(7):295-296.	Editorial
Gibbons RJ, Abrams J, Chatterjee K et al. ACC/AHA 2002 guideline update for the management of patients with chronic stable angina--summary article: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Committee on the Management of Patients With Chronic Stable Angina). Circulation. 2003; 107(1):149-158.	Guideline
Chaitman BR, Skettino SL, Parker JO et al. Anti-ischemic effects and long-term survival during ranolazine monotherapy in patients with chronic severe angina. J Am Coll Cardiol. 2004; 43(8):1375-1382.	Drug given for one week – follow up one year
Rousseau MF, Pouleur H, Cocco G et al. Comparative efficacy of ranolazine versus atenolol for chronic angina pectoris. Am J Cardiol. 2005; 95(3):311-316.	Follow-up 1 week
Pepine CJ, Wolff AA. A controlled trial with a novel anti-Ischemic agent, ranolazine, in chronic stable angina pectoris that is responsive to conventional antianginal agents. Am J Cardiol. 1999; 84(1):46-50.	SD/SE not reported. Data cannot be analysed.
Thadani U, Ezekowitz M, Fenney L et al. Double-blind efficacy and safety study of a novel anti-ischemic agent, ranolazine, versus placebo in patients	Sub therapeutic doses of the drug.

with chronic stable angina pectoris. Circulation. 1994; 90(2):726-734.	
Fox KM. Ivabradine - A selective and specific I_f inhibitor: Efficacy and safety in stable angina. European Heart Journal - Supplement. 2003; 5(G):G36-G45.	No numerical data. Graph form. Angina attack data for 10 mg only, BNF max dose 7.5 mg.
Fox KM, Ford I, Steg PG et al. Ivabradine for patients with stable coronary artery disease and left-ventricular systolic dysfunction (BEAUTIFUL): a randomised, double-blind, placebo-controlled trial. Lancet. 2008; 372(9641):807-816.	Angina patients < 60% (sub group analysis for angina patients included in the review)
Ferrari R, Ford I, Fox K et al. The BEAUTIFUL study: Randomized trial of ivabradine in patients with stable coronary artery disease and left ventricular systolic dysfunction - Baseline characteristics of the study population. Cardiology. 2008; 110(4):271-282	Methodology paper
Aalbers J. Comparison of ivabradine plus beta-blockers versus beta -blocker therapy only. Cardiovascular Journal of Africa. 2010; 21(2):116-Apr.	abstract
Amosova EN, Andrejev E, Zadereij I. Anti-ischemic and antianginal efficacy of ivabradine in combination with bisoprolol vs. uptitration of bisoprolol. Fundam Clin Pharmacol. 2010; Conference(var.pagings):33.	abstract
Koster R, Kaehler J, Meinertz T et al. Treatment of stable angina pectoris by ivabradine in every day practice: the REDUCTION study. Am Heart J. 2009; 158(4):e51-e57.	Non-RCT
Marrs JC, Kramer WT. Ranolazine's role in treatment of chronic stable angina. J Pharm Technol. 2010; 26(2):71-76.	Review. Relevant studies including in our evidence\review.

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REVASCULARISATION VS. MEDICAL THERAPY

Included Studies

Study
Boden WE, O'Rourke RA, Teo KK et al. Optimal medical therapy with or without PCI for stable coronary disease. *N Engl J Med.* 2007; 356(15):1503-1516.
Anon. Coronary-artery bypass surgery in stable angina pectoris: Survival at two years. European Coronary Surgery Study Group. *Lancet.* 1979; 1(8122):889-893.
Kaiser C, Kuster GM, Erne P et al. Risks and benefits of optimised medical and revascularisation therapy in elderly patients with angina--on-treatment analysis of the TIME trial. *Eur Heart J.* 2004; 25(12):1036-1042.
Henderson RA, Pocock SJ, Clayton TC et al. Seven-year outcome in the RITA-2 trial: coronary angioplasty versus medical therapy. *J Am Coll Cardiol.* 2003; 42(7):1161-1170.
Pitt B, Waters D, Brown WV et al. Aggressive lipid-lowering therapy compared with angioplasty in stable coronary artery disease. Atorvastatin versus Revascularization Treatment Investigators. *N Engl J Med.* 1999; 341(2):70-76.
Alderman EL, Bourassa MG, Cohen LS et al. Ten-year follow-up of survival and myocardial infarction in the randomized Coronary Artery Surgery Study. *Circulation.* 1990; 82(5):1629-1646.
Chamberlain DA, Fox K.A., Henderson RA et al. Coronary angioplasty versus medical therapy for angina: The second randomised intervention treatment of angina (RITA-2) trial. *Lancet.* 1997; 350(9076):461-468.
Pfisterer M, Trial of Invasive versus Medical therapy in Elderly patients Investigators. Long-term outcome in elderly patients with chronic angina managed invasively versus by optimized medical therapy: four-year follow-up of the randomized Trial of Invasive versus Medical therapy in Elderly patients (TIME). *Circulation.* 2004; 110(10):1213-1218.
Pocock SJ, Henderson RA, Clayton T et al. Quality of life after coronary angioplasty or continued medical treatment for angina: three-year follow-up in the RITA-2 trial. Randomized Intervention Treatment of Angina. *J Am Coll Cardiol.* 2000; 35(4):907-914.
Pfisterer M, Buser P, Osswald S et al. Outcome of elderly patients with chronic symptomatic coronary artery disease with an invasive vs optimized medical treatment strategy: one-year results of the randomized TIME trial. *Journal of the American Medical Association.* 2003; 289(9):1117-1123.
Rogers WJ, Coggin CJ, Gersh BJ et al. Ten-year follow-up of quality of life in

patients randomized to receive medical therapy or coronary artery bypass graft surgery. The Coronary Artery Surgery Study (CASS). *Circulation*. 1990; 82(5):1647-1658.

Teo KK, Sedlis SP, Boden WE et al. Optimal Medical Therapy With or Without Percutaneous Coronary Intervention in Older Patients With Stable Coronary Disease. A Pre-Specified Subset Analysis of the COURAGE (Clinical Outcomes Utilizing Revascularization and Aggressive druG Evaluation) Trial. *J Am Coll Cardiol*. 2009; 54(14):1303-1308.

Maron DJ, Spertus JA, Mancini GB et al. Impact of an initial strategy of medical therapy without percutaneous coronary intervention in high-risk patients from the Clinical Outcomes Utilizing Revascularization and Aggressive DruG Evaluation (COURAGE) trial. *Am J Cardiol*. 2009; 104(8):1055-1062.

Bhayana JN, Gage AA, Takaro T. Long-term results of internal mammary artery implantation for coronary artery disease: a controlled trial by the participants of the Veterans Administration Coronary Bypass Surgery Cooperative Study Group. *Ann Thorac Surg*. 1980; 29(3):234-242.

Guinn GA, Mathur VS. Surgical versus medical treatment for stable angina pectoris: prospective randomized study with 1- to 4-year follow-up. *Ann Thorac Surg*. 1976; 22(6):524-527.

Peduzzi P, Hultgren H, Thomsen J et al. Ten-year effect of medical and surgical therapy on quality of life: Veterans Administration Cooperative Study of Coronary Artery Surgery. *Am J Cardiol*. 1987; 59(12):1017-1023.

Read RC, Murphy ML, Hultgren HN et al. Survival of men treated for chronic stable angina pectoris. A cooperative randomized study. *Journal of Thoracic & Cardiovascular Surgery*. 1978; 75(1):1-16.

Anon. Eleven-year survival in the Veterans Administration randomized trial of coronary bypass surgery for stable angina. The Veterans Administration Coronary Artery Bypass Surgery Cooperative Study Group. *N Engl J Med*. 1984; 311(21):1333-1339.

Murphy ML, Hultgren HN, Detre K et al. Treatment of chronic stable angina. A preliminary report of survival data of the randomized Veterans Administration cooperative study. *N Engl J Med*. 1977; 297(12):621-627.

Detre K, Murphy ML, Hultgren H. Effect of coronary bypass surgery on longevity in high and low risk patients. Report from the V.A. Cooperative Coronary Surgery Study. *Lancet*. 1977; 2(8051):1243-1245.

Hartigan PM, Giacomini JC, Folland ED et al. Two- to three-year follow-up of patients with single-vessel coronary artery disease randomized to PTCA or medical therapy (results of a VA cooperative study). Veterans Affairs Cooperative Studies Program ACME Investigators. Angioplasty Compared to

Medicine. *Am J Cardiol*. 1998; 82(12):1445-1450.

Peduzzi P. Eighteen-year follow-up in the Veterans Affairs Cooperative Study of Coronary Artery Bypass Surgery for stable angina. *Circulation*. 1992; 86(1):121-130.

Varnauskas E. Twelve-year follow-up of survival in the randomized European Coronary Surgery Study. *N Engl J Med*. 1988; 319(6):332-337.

Varnauskas E, Olsson SB, Carlstrom E. Long-term results of prospective randomised study of coronary artery bypass surgery in stable angina pectoris. *Lancet*. 1982; 2(8309):1173-1180.

Anon. Myocardial infarction and mortality in the coronary artery surgery study (CASS) randomized trial. *N Engl J Med*. 1984; 310(12):750-758.

Passamani E, Davis KB, Gillespie MJ et al. A randomized trial of coronary artery bypass surgery. Survival of patients with a low ejection fraction. *N Engl J Med*. 1985; 312(26):1665-1671.

Parisi AF, Folland ED, Hartigan P. A comparison of angioplasty with medical therapy in the treatment of single-vessel coronary artery disease. Veterans Affairs ACME Investigators. *N Engl J Med*. 1992; 326(1):10-16.

Mathur VS, Guinn GA. Prospective randomized study of coronary bypass surgery in stable angina. The first 100 patients. *Circulation*. 1975; 52(2 Suppl):I133-I140.

Frick MH, Harjola PT, Valle M. Coronary bypass surgery in stable angina pectoris. A randomized study of the effects on morbidity, mortality and employment. *Acta Med Scand Suppl*. 1985; 701:148-154.

Mathur VS, Guinn GA, Anastassiades LC et al. Surgical treatment for stable angina pectoris. Prospective randomized study. *N Engl J Med*. 1975; 292(14):709-713.

Strauss WE, Fortin T, Hartigan P et al. A comparison of quality of life scores in patients with angina pectoris after angioplasty compared with after medical therapy. Outcomes of a randomized clinical trial. Veterans Affairs Study of Angioplasty Compared to Medical Therapy Investigators. *Circulation*. 1995; 92(7):1710-1719.

Davies RF, Goldberg AD, Forman S et al. Asymptomatic Cardiac Ischemia Pilot (ACIP) study two-year follow-up: outcomes of patients randomized to initial strategies of medical therapy versus revascularization. *Circulation*. 1997; 95(8):2037-2043.

Rogers WJ, Bourassa MG, Andrews TC et al. Asymptomatic Cardiac Ischemia Pilot (ACIP) study: outcome at 1 year for patients with asymptomatic cardiac ischemia randomized to medical therapy or revascularization. The ACIP

Investigators. *J Am Coll Cardiol*. 1995; 26(3):594-605.

Kloster FE, Kremkau EL, Ritzmann LW et al. Coronary bypass for stable angina: a prospective randomized study. *N Engl J Med*. 1979; 300(4):149-157.

Loeb HS, Pifarre R, Sullivan H et al. Improved survival after surgical therapy for chronic angina pectoris: one hospital's experience in a randomized trial. *Circulation*. 1979; 60(2:Pt 2):t-30.

Bourassa MG, Knatterud GL, Pepine CJ et al. Asymptomatic cardiac ischemia pilot (ACIP) study: Improvement of cardiac ischemia at 1 year after PTCA and CABG. *Circulation*. 1995; 92(9 SUPPL.):II1-II7.

Anon. Coronary artery surgery study (CASS): a randomized trial of coronary artery bypass surgery. Quality of life in patients randomly assigned to treatment groups. *Circulation*. 1983; 68(5):951-960.

Pfisterer M, Bertel O, Erne P et al. Trial of invasive versus medical therapy in elderly patients with chronic symptomatic coronary-artery disease (TIME): a randomised trial. *Lancet*. 2001; 358(9286):951-957.

Peduzzi P, Kamina A, Detre K. Twenty-two-year follow-up in the VA Cooperative Study of Coronary Artery Bypass Surgery for Stable Angina. *Am J Cardiol*. 1998; 81(12):1393-1399.

Folland ED, Hartigan PM, Parisi AF. Percutaneous transluminal coronary angioplasty versus medical therapy for stable angina pectoris: outcomes for patients with double-vessel versus single-vessel coronary artery disease in a Veterans Affairs Cooperative randomized trial. Veterans Affairs ACME InvestigatorS. *J Am Coll Cardiol*. 1997; 29(7):1505-1511.

Killip T, Passamani E, Davis K. Coronary artery surgery study (CASS): a randomized trial of coronary bypass surgery. Eight years follow-up and survival in patients with reduced ejection fraction. *Circulation*. 1985; 72(suppl 5):V102-V109.

Frye RL, August P, Brooks MM et al. A randomized trial of therapies for type 2 diabetes and coronary artery disease. *N Engl J Med*. 2009; 360(24):2503-2515.

Yusuf S, Zucker D, Peduzzi P et al. Effect of coronary artery bypass graft surgery on survival: overview of 10-year results from randomised trials by the Coronary Artery Bypass Graft Surgery Trialists Collaboration. *Lancet*. 1994; 344(8922):563-570.

Mathur VS, Guinn GA. Prospective randomized study of the surgical therapy of stable angina. *Cardiovasc Clin*. 1977; 8(2):131-144.

Varnauskas E. Survival, myocardial infarction, and employment status in a prospective randomized study of coronary bypass surgery. *Circulation*. 1985;

72(6 Pt 2):V90-101.

Detre KM, Takaro T, Hultgren H et al. Long-term mortality and morbidity results of the Veterans Administration randomized trial of coronary artery bypass surgery. *Circulation*. 1985; 72(6 Pt 2):V84-V89.

Hultgren HN, Peduzzi P, Detre K et al. The 5 year effect of bypass surgery on relief of angina and exercise performance. *Circulation*. 1985; 72(6:Pt 2):t-83.

Weintraub WS, Spertus JA, Kolm P et al. Effect of PCI on quality of life in patients with stable coronary disease. *N Engl J Med*. 2008; 359(7):677-687.

Hueb WA, Soares PR, Almeida D et al. Five-year follow-up of the medicine, angioplasty, or surgery study (MASS): A prospective, randomized trial of medical therapy, balloon angioplasty, or bypass surgery for single proximal left anterior descending coronary artery stenosis. *Circulation*. 1999; 100(19 suppl):II107-II113.

Hueb WA, Bellotti G, de Oliveira SA et al. The Medicine, Angioplasty or Surgery Study (MASS): a prospective, randomized trial of medical therapy, balloon angioplasty or bypass surgery for single proximal left anterior descending artery stenoses. *J Am Coll Cardiol*. 1995; 26(7):1600-1605.

Hueb W, Soares PR, Gersh BJ et al. The medicine, angioplasty, or surgery study (MASS-II): a randomized, controlled clinical trial of three therapeutic strategies for multivessel coronary artery disease: one-year results. *J Am Coll Cardiol*. 2004; 43(10):1743-1751.

Hueb W, Lopes NH, Gersh BJ et al. Five-year follow-up of the Medicine, Angioplasty, or Surgery Study (MASS II): A randomized controlled clinical trial of 3 therapeutic strategies for multivessel coronary artery disease. *Circulation*. 2007; 115(9):1082-1089.

Hueb W, Lopes N, Gersh BJ et al. Ten-Year Follow-Up Survival of the Medicine, Angioplasty, or Surgery Study (MASS II). A Randomized Controlled Clinical Trial of 3 Therapeutic Strategies for Multivessel Coronary Artery Disease. Circulation. 2010;

Favarato ME, Hueb W, Boden WE et al. Quality of life in patients with symptomatic multivessel coronary artery disease: a comparative post hoc analyses of medical, angioplasty or surgical strategies-MASS II trial. *Int J Cardiol*. 2007; 116(3):364-370.

Soares PR, Hueb WA, Lemos PA et al. Coronary revascularization (surgical or percutaneous) decreases mortality after the first year in diabetic subjects but not in nondiabetic subjects with multivessel disease: An analysis from the medicine, angioplasty, or surgery study (MASS II). *Circulation*. 2006; 114(SUPPL. 1):I420-I424.

Lopes NH, Paulitsch FS, Gois AF et al. Impact of number of vessels disease on outcome of patients with stable coronary artery disease: 5-year follow-up of the Medical, Angioplasty, and bypass Surgery study (MASS). *Eur J*

Cardiothorac Surg. 2008; 33(3):349-354.

Excluded Studies

Study	Reasons for exclusion
Takiuti ME, Hueb W, Hiscock SB et al. Quality of life after surgical myocardial revascularization, angioplasty or medical treatment. *Arq Bras Cardiol*. 2007; 88(5):537-544..	Reported in Ref ID 501
Boden WE, O'Rourke RA, Teo KK et al. The evolving pattern of symptomatic coronary artery disease in the United States and Canada: baseline characteristics of the Clinical Outcomes Utilizing Revascularization and Aggressive DruG Evaluation (COURAGE) trial. *Am J Cardiol*. 2007; 99(2):208-212.	Only baseline characteristics
King SB, III. Angioplasty is better than medical therapy for alleviating chronic angina pectoris. *Arch Intern Med*. 2005; 165(22):2589-2592.	Narrative/article
Katritsis DG, Ioannidis JP. Percutaneous coronary intervention versus conservative therapy in nonacute coronary artery disease: a meta-analysis. *Circulation*. 2005; 111(22):2906-2912.	Meta-analysis
Allen KB, Dowling RD, Angell WW et al. Transmyocardial revascularization: 5-year follow-up of a prospective, randomized multicenter trial. *Ann Thorac Surg*. 2004; 77(4):1228-1234.	Refractory angina
Hoffman SN, TenBrook JA, Wolf MP et al. A meta-analysis of randomized controlled trials comparing coronary artery bypass graft with percutaneous transluminal coronary angioplasty: one- to eight-year outcomes. *J Am Coll Cardiol*. 2003; 41(8):1293-1304.	Meta-analysis
Waters DD. Medical therapy versus revascularization: the atorvastatin versus revascularization treatment AVERT trial. *Can J Cardiol*. 2000; 16 Suppl A:11A-3A, 2000 Jan.:11A-13A.	Results reported in 1482
Solomon AJ, Gersh BJ. Management of chronic stable angina: medical therapy, percutaneous transluminal coronary angioplasty, and coronary artery bypass graft surgery. Lessons from the randomized trials. *Ann Intern Med*. 1998; 128(3):216-223.	Meta-analysis
Parisi AF, Hartigan PM, Folland ED. Evaluation of	Non relevant

exercise thallium scintigraphy versus exercise electrocardiography in predicting survival outcomes and morbid cardiac events in patients with single- and double-vessel disease. Findings from the Angioplasty Compared to Medicine (ACME) Study. *J Am Coll Cardiol*. 1997; 30(5):1256-1263.	outcome (prognostic ability of cardiac exercise stress test to predict cardiac mortality)
Bourassa MG, Pepine CJ, Forman SA et al. Asymptomatic Cardiac Ischemia Pilot (ACIP) study: effects of coronary angioplasty and coronary artery bypass graft surgery on recurrent angina and ischemia. The ACIP investigators. *J Am Coll Cardiol*. 1995; 26(3):606-614.	Follow-up too short (12 weeks)
Hwang MH, Meadows WR, Palac RT et al. Progression of native coronary artery disease at 10 years: insights from a randomized study of medical versus surgical therapy for angina. *J Am Coll Cardiol*. 1990; 16(5):1066-1070.	Sample size too small (N=42)
Ellis SG, Fisher L, Dushman ES et al. Comparison of coronary angioplasty with medical treatment for single- and double-vessel coronary disease with left anterior descending coronary involvement: long-term outcome based on an Emory-CASS registry study. *Am Heart J*. 1989; 118(2):208-220.	Registry study
Myers WO, Davis K, Foster ED et al. Surgical survival in the Coronary Artery Surgery Study (CASS) registry. *Ann Thorac Surg*. 1985; 40(3):245-260.	Non-RCT
Loop FD. CASS continued. *Circulation*. 1985; 72(3:Pt 2):t-6.	Article
Kaiser GC, Davis KB, Fisher LD et al. Survival following coronary artery bypass grafting in patients with severe angina pectoris (CASS). An observational study. *Journal of Thoracic & Cardiovascular Surgery*. 1985; 89(4):513-524.	Registry study
Anon. Coronary artery surgery study (CASS): a randomized trial of coronary artery bypass surgery. Comparability of entry characteristics and survival in randomized patients and nonrandomized patients meeting randomization criteria. *J Am Coll Cardiol*. 1984; 3(1):114-128.	Comparison of baseline characteristics only
Pantely GA, Kloster FE, Morris CD. Late exercise test results from a prospective randomized study of bypass surgery for stable angina. *Circulation*. 1983; 68(2):413-419.	Outcome exercise test

Anon. Does PCI added to drug therapy improve outcomes in stable CAD? *J Fam Pract.* 2007; 56(7):529.	Article
Brown TM, Bittner V. Management of stable patients with coronary heart disease: Clinical implications of the Clinical Outcomes Utilizing Revascularization and Aggressive Drug Evaluation (COURAGE) trial. *Journal of Clinical Lipidology*. 2007; 1(6):564-574.	Review
Frick MH, Harjola PT, Valle M. Twelve years of coronary bypass surgery in Helsinki. Effects on morbidity, employment, and mortality. *Acta Med Scand.* 1982; 212(Suppl. 668):7-12.	Non RCT
Guyton RA. Appropriate medical management and CABG. *N Engl J Med.* 2007; 357(17):1765-1766.	abstract
Morrison DA, Sacks J. Balancing benefit against risk in the choice of therapy for coronary artery disease: Lesson from prospective, randomized, clinical trials of percutaneous coronary intervention and coronary artery bypass graft surgery. *Minerva Cardioangiol.* 2003; 51(5):585-597.	review
Takaro T. Results of a randomized study of medical and surgical management of angina pectoris. *World J Surg.* 1978; 2(6):797-807.	Data reported in other papers (VA study)
Palac RT, Hwang MH, Meadows WR et al. Progression of coronary artery disease in medically and surgically treated patients 5 years after randomization. *Circulation.* 1981; 64(2 Pt 2):II17-II21.	Non relevant outcomes
Chaitman BR, Stone PH, Knatterud GL et al. Asymptomatic Cardiac Ischemia Pilot (ACIP) study: impact of anti-ischemia therapy on 12-week rest electrocardiogram and exercise test outcomes. The ACIP Investigators. *J Am Coll Cardiol.* 1995; 26(3):585-593.	Follow up too short (12 weeks)
Conti CR, Geller NL, Knatterud GL et al. Anginal status and prediction of cardiac events in patients enrolled in the asymptomatic cardiac ischemia pilot (ACIP) study. ACIP investigators. *Am J Cardiol.* 1997; 79(7):889-892.	Non relevant outcomes (predictor of adverse events)
Boden WE, O'Rourke RA, Teo KK et al. Impact of optimal medical therapy with or without percutaneous coronary intervention on long-term cardiovascular end	Outcomes reported in 483

points in patients with stable coronary artery disease (from the COURAGE Trial). *Am J Cardiol*. 2009; 104(1):1-4.	
Zaman MJ, Crook AM, Junghans C et al. Ethnic differences in long-term improvement of angina following revascularization or medical management: a comparison between south Asians and white Europeans. *Journal of Public Health*. 2009; 31(1):168-174.	Non RCT
Atwater BD, Oujiri J, Wolff MR. The immediate impact of the Clinical Outcomes Utilizing Revascularization and Aggressive Drug Evaluation (COURAGE) trial on the management of stable angina. *Clin Cardiol*. 2009; 32(8):E1-E3.	Wrong comparison (pre-trial vs post trial)
Pereira AC, Lopes NH, Soares PR et al. Clinical judgment and treatment options in stable multivessel coronary artery disease: results from the one-year follow-up of the MASS II (Medicine, Angioplasty, or Surgery Study II). *J Am Coll Cardiol*. 2006; 48(5):948-953.	Results in Ref ID 501
Jones RH, Kesler K, Phillips HR, III et al. Long-term survival benefits of coronary artery bypass grafting and percutaneous transluminal angioplasty in patients with coronary artery disease. *Journal of Thoracic & Cardiovascular Surgery*. 1996; 111(5):1013-1025.	Non-RCT
Espinola-Klein C, Rupprecht HJ, Erbel R et al. Ten-year outcome after coronary angioplasty in patients with single-vessel coronary artery disease and comparison with the results of the Coronary Artery Surgery Study (CASS). *Am J Cardiol*. 2000; 85(3):321-326.	Wrong comparison (compare their data to CASS data)
Gersh BJ, Kronmal RA, Schaff HV et al. Comparison of coronary artery bypass surgery and medical therapy in patients 65 years of age or older. A nonrandomized study from the Coronary Artery Surgery Study (CASS) registry. *N Engl J Med*. 1985; 313(4):217-224.	Non RCT
Kennedy JN, Davis KB. Fifteen year follow-up of men and women with initial medical or surgical management of coronary artery disease (abstract). *Circulation*. 1992; 86(suppl 1):773.	abstract
Detre KM, Peduzzi P, Hammermeister KE et al. Five-	Outcomes in

year effect of medical and surgical therapy on resting left ventricular function in stable angina: Veterans Administration Cooperative Study. *Am J Cardiol*. 1984; 53(4):444-450.	remit- LV function
Varnauskas E, Olsson SB, Carlstrom E. Prospective randomised study of coronary artery bypass surgery in stable angina pectoris. Second interim report by the European Coronary Surgery Study Group. *Lancet*. 1980; 2(8193):491-495.	Interim report of 3940
Varnauskas E, Olsson SB, Carlstrom E. Prospective randomized study of coronary artery bypass surgery in stable angina pectoris: A progress report on survival. *Circulation*. 1982; 65(7 II):II67-II71.	Progress report of 3940
Varnauskas E. European coronary surgery study. *Z Kardiol*. 1985; 74 Suppl 6:73-8, 1985.:73-78.	Narrative summary
Pitt B. Percutaneous coronary intervention plus optimal medical therapy was not more effective than medical therapy alone in stable CAD. *Evidence-Based Medicine*. 2007; 12(4):107.	Abstract
Pepine CJ, Geller NL, Knatterud GL et al. The Asymptomatic Cardiac Ischemia Pilot (ACIP) study: design of a randomized clinical trial, baseline data and implications for a long-term outcome trial. *J Am Coll Cardiol*. 1994; 24(1):1-10.	Methodology
Zeymer U, Uebis R, Vogt A et al. Randomized comparison of percutaneous transluminal coronary angioplasty and medical therapy in stable survivors of acute myocardial infarction with single vessel disease: a study of the Arbeitsgemeinschaft Leitende Kardiologische Krankenhausarzte. *Circulation*. 2003; 108(11):1324-1328.	Patients with MI

PCI VS. CABG

Included Studies

Study
Booth J, Clayton T, Pepper J et al. Randomized, controlled trial of coronary artery bypass surgery versus percutaneous coronary intervention in patients with multivessel coronary artery disease: six-year follow-up from the Stent or Surgery Trial (SoS). *Circulation*. 2008; 118(4):381-388.
Drenth DJ, Veeger NJ, Grandjean JG et al. Isolated high-grade lesion of the proximal LAD: a stent or off-pump LIMA? *Eur J Cardiothorac Surg*. 2004;

25(4):567-571.

Eefting F, Nathoe H, van DD et al. Randomized comparison between stenting and off-pump bypass surgery in patients referred for angioplasty. *Circulation*. 2003; 108(23):2870-2876.

Unger F, Serruys PW, Yacoub MH et al. Revascularization in multivessel disease: comparison between two-year outcomes of coronary bypass surgery and stenting. *Journal of Thoracic & Cardiovascular Surgery*. 2003; 125(4):809-820.

Drenth DJ, Veeger NJ, Winter JB et al. A prospective randomized trial comparing stenting with off-pump coronary surgery for high-grade stenosis in the proximal left anterior descending coronary artery: three-year follow-up. *J Am Coll Cardiol*. 2002; 40(11):1955-1960.

Anon. First-year results of CABRI (Coronary Angioplasty versus Bypass Revascularisation Investigation). CABRI Trial Participants. *Lancet*. 1995; 346(8984):1179-1184.

Drenth DJ, Winter JB, Veeger NJGM et al. Minimally invasive coronary artery bypass grafting versus percutaneous transluminal coronary angioplasty with stenting in isolated high-grade stenosis of the proximal left anterior descending coronary artery: Six months' angiographic and clinical follow-up of a prospective randomized study. *J Thorac Cardiovasc Surg*. 2002; 124(1):130-135.

Hampton JR, Henderson RA, Julian DG et al. Coronary angioplasty versus coronary artery bypass surgery: The Randomised Intervention Treatment of Angina (RITA) trial. *Lancet*. 1993; 341(8845):573-580.

King IIIS, Kosinski AS, Guyton RA et al. Eight-year mortality in the Emory Angioplasty versus Surgery Trial (EAST). *J Am Coll Cardiol*. 2000; 35(5):1116-1121.

Martuscelli E, Clementi F, Gallagher MM et al. Revascularization strategy in patients with multivessel disease and a major vessel chronically occluded; data from the CABRI trial. *Eur J Cardiothorac Surg*. 2008; 33(1):4-8.

Serruvs PW, Morice MC, Kappetein AP et al. Percutaneous coronary intervention versus coronary-artery bypass grafting for severe coronary artery disease. *N Engl J Med*. 2009; 360(10):961-972.

Serruys PW, Unger F, Sousa JE et al. Comparison of coronary-artery bypass surgery and stenting for the treatment of multivessel disease. *N Engl J Med*. 2001; 344(15):1117-1124.

Sigwart U, Stables R, Booth J et al. Coronary artery bypass surgery versus percutaneous coronary intervention with stent implantation in patients with multivessel coronary artery disease (the Stent or Surgery trial): A randomised controlled trial. *Lancet*. 2002; 360(9338):965-970.

Serruys PW, Ong AT, van Herwerden LA et al. Five-year outcomes after

coronary stenting versus bypass surgery for the treatment of multivessel disease: the final analysis of the Arterial Revascularization Therapies Study (ARTS) randomized trial. *J Am Coll Cardiol*. 2005; 46(4):575-581.

Cisowski M, Drzewiecki J, Drzewiecka-Gerber A et al. Primary stenting versus MIDCAB: preliminary report-comparision of two methods of revascularization in single left anterior descending coronary artery stenosis. *Ann Thorac Surg*. 2002; 74(4):S1334-S1339.

Abizaid A, Costa MA, Centemero M et al. Clinical and economic impact of diabetes mellitus on percutaneous and surgical treatment of multivessel coronary disease patients: insights from the Arterial Revascularization Therapy Study (ARTS) trial. *Circulation*. 2001; 104(5):533-538.

Goy JJ, Eeckhout E, Burnand B et al. Coronary angioplasty versus left internal mammary artery grafting for isolated proximal left anterior descending artery stenosis. *Lancet*. 1994; 343(8911):1449-1453.

Zhang Z, Mahoney EM, Spertus JA et al. The impact of age on outcomes after coronary artery bypass surgery versus stent-assisted percutaneous coronary intervention: one-year results from the Stent or Surgery (SoS) trial. *Am Heart J*. 2006; 152(6):1153-1160.

King SB, III, Lembo NJ, Weintraub WS et al. A randomized trial comparing coronary angioplasty with coronary bypass surgery. Emory Angioplasty versus Surgery Trial (EAST). *N Engl J Med*. 1994; 331(16):1044-1050.

Kurbaan AS, Bowker TJ, Ilsley CD et al. Difference in the mortality of the CABRI diabetic and nondiabetic populations and its relation to coronary artery disease and the revascularization mode. *Am J Cardiol*. 2001; 87(8):947-950.

Pocock SJ, Henderson RA, Seed P et al. Quality of life, employment status, and anginal symptoms after coronary angioplasty or bypass surgery. 3-year follow-up in the Randomized Intervention Treatment of Angina (RITA) Trial. *Circulation*. 1996; 94(2):135-142.

Drenth DJ, Veeger NJ, Middel B et al. Comparison of late (four years) functional health status between percutaneous transluminal angioplasty intervention and off-pump left internal mammary artery bypass grafting for isolated high-grade narrowing of the proximal left anterior descending coronary artery. *Am J Cardiol*. 2004; 94(11):1414-1417.

Buszman P, Wiernek S, Szymanski R et al. Percutaneous versus surgical revascularization for multivessel coronary artery disease: a single center 10 year follow-up of SOS trial patients. *Catheterization & Cardiovascular Interventions*. 2009; 74(3):420-426.

Aoki J, Ong AT, Arampatzis CA et al. Comparison of three-year outcomes after coronary stenting versus coronary artery bypass grafting in patients with multivessel coronary disease, including involvement of the left anterior descending coronary artery proximally (a subanalysis of the arterial

revascularization therapies study trial). *Am J Cardiol*. 2004; 94(5):627-631.

Kaehler J, Koester R, Billmann W et al. 13-year follow-up of the German angioplasty bypass surgery investigation. *Eur Heart J*. 2005; 26(20):2148-2153.

Legrand VM, Serruys PW, Unger F et al. Three-year outcome after coronary stenting versus bypass surgery for the treatment of multivessel disease. *Circulation*. 2004; 109(9):1114-1120.

Zhang Z, Mahoney EM, Stables RH et al. Disease-specific health status after stent-assisted percutaneous coronary intervention and coronary artery bypass surgery: one-year results from the Stent or Surgery trial. *Circulation*. 2003; 108(14):1694-1700.

Goy JJ, Kaufmann U, Goy-Eggenberger D et al. A prospective randomized trial comparing stenting to internal mammary artery grafting for proximal, isolated de novo left anterior coronary artery stenosis: the SIMA trial. Stenting vs Internal Mammary Artery. *Mayo Clin Proc*. 2000; 75(11):1116-1123.

Hamm CW, Reimers J, Ischinger T et al. A randomized study of coronary angioplasty compared with bypass surgery in patients with symptomatic multivessel coronary disease. German Angioplasty Bypass Surgery Investigation (GABI). *N Engl J Med*. 1994; 331(16):1037-1043.

Henderson RA, Pocock SJ, Sharp SJ et al. Long-term results of RITA-1 trial: clinical and cost comparisons of coronary angioplasty and coronary-artery bypass grafting. Randomised Intervention Treatment of Angina. *Lancet*. 1998; 352(9138):1419-1425.

Buszman PE, Kiesz SR, Bochenek A et al. Acute and late outcomes of unprotected left main stenting in comparison with surgical revascularization. *J Am Coll Cardiol*. 2008; 51(5):538-545.

Goy JJ, Kaufmann U, Hurni M et al. 10-year follow-up of a prospective randomized trial comparing bare-metal stenting with internal mammary artery grafting for proximal, isolated de novo left anterior coronary artery stenosis the SIMA (Stenting versus Internal Mammary Artery grafting) trial. *J Am Coll Cardiol*. 2008; 52(10):815-817.

Hlatky MA, Boothroyd DB, Bravata DM et al. Coronary artery bypass surgery compared with percutaneous coronary interventions for multivessel disease: a collaborative analysis of individual patient data from ten randomised trials. *Lancet*. 2009; 373(9670):1190-1197.

Kapur A, Hall RJ, Malik IS et al. Randomized comparison of percutaneous coronary intervention with coronary artery bypass grafting in diabetic patients. 1-year results of the CARDia (Coronary Artery Revascularization in Diabetes) trial. *J Am Coll Cardiol*. 2010; 55(5):432-440.

Banning AP, Westaby S, Morice MC et al. Diabetic and Nondiabetic Patients With Left Main and/or 3-Vessel Coronary Artery Disease Comparison of Outcomes With Cardiac Surgery and Paclitaxel-Eluting Stents

1. *J Am Coll Cardiol*. 2010; 55(11):1067-1075.
Morice MC, Serruys PW, Kappetein AP et al. Outcomes in patients with de novo left main disease treated with either percutaneous coronary intervention using paclitaxel-eluting stents or coronary artery bypass graft treatment in the Synergy Between Percutaneous Coronary Intervention with TAXUS and Cardiac Surgery (SYNTAX) trial. *Circulation*. 2010; 121(24):2645-2653.
Hueb W, Soares PR, Gersh BJ et al. The medicine, angioplasty, or surgery study (MASS-II): a randomized, controlled clinical trial of three therapeutic strategies for multivessel coronary artery disease: one-year results. *J Am Coll Cardiol*. 2004; 43(10):1743-1751.
Hueb W, Lopes NH, Gersh BJ et al. Five-year follow-up of the Medicine, Angioplasty, or Surgery Study (MASS II): A randomized controlled clinical trial of 3 therapeutic strategies for multivessel coronary artery disease. *Circulation*. 2007; 115(9):1082-1089.
Hueb W, Lopes N, Gersh BJ et al. Ten-Year Follow-Up Survival of the Medicine, Angioplasty, or Surgery Study (MASS II). A Randomized Controlled Clinical Trial of 3 Therapeutic Strategies for Multivessel Coronary Artery Disease. Circulation. 2010;
Soares PR, Hueb WA, Lemos PA et al. Coronary revascularization (surgical or percutaneous) decreases mortality after the first year in diabetic subjects but not in nondiabetic subjects with multivessel disease: An analysis from the medicine, angioplasty, or surgery study (MASS II). *Circulation*. 2006; 114(SUPPL. 1):I420-I424.
Hueb WA, Soares PR, Almeida D et al. Five-year follow-up of the medicine, angioplasty, or surgery study (MASS): A prospective, randomized trial of medical therapy, balloon angioplasty, or bypass surgery for single proximal left anterior descending coronary artery stenosis. *Circulation*. 1999; 100(19 suppl):II107-II113.
Hueb WA, Bellotti G, de Oliveira SA et al. The Medicine, Angioplasty or Surgery Study (MASS): a prospective, randomized trial of medical therapy, balloon angioplasty or bypass surgery for single proximal left anterior descending artery stenoses. *J Am Coll Cardiol*. 1995; 26(7):1600-1605.

Excluded List

Study	Reasons for exclusion
Hannan EL, Racz MJ, Walford G et al. Long-term outcomes of coronary-artery bypass grafting versus stent implantation. *N Engl J Med*. 2005; 352(21):2174-2183.	Registry
Diegeler A, Spyrantis N, Matin M et al. The revival of surgical treatment for isolated proximal high grade LAD lesions by minimally	Outcomes outside remit (e.g. injury to IMA,

invasive coronary artery bypass grafting. *Eur J Cardiothorac Surg*. 2000; 17(5):501-504.	injury to right ventricle)
Hueb W, Lopes NHM, Gersh BJ et al. A randomized comparative study of patients undergoing myocardial revascularization with or without cardiopulmonary bypass surgery: The MASS III Trial. *Trials*. 2008; 9:52TN.	Study protocol
Alderman EL, Kip KE, Whitlow PL et al. Native coronary disease progression exceeds failed revascularization as cause of angina after five years in the Bypass Angioplasty Revascularization Investigation (BARI).[see comment]. *J Am Coll Cardiol*. 2004; 44(4):766-774.	Outcomes outside remit (Myocardial jeopardy)
Niles NW, McGrath PD, Malenka D et al. Survival of patients with diabetes and multivessel coronary artery disease after surgical or percutaneous coronary revascularization: Results of a large regional prospective study. *J Am Coll Cardiol*. 2001; 37(4):1008-1015.	Non RCT
Vander Salm TJ, Kip KE, Jones RH et al. What constitutes optimal surgical revascularization? Answers from the Bypass Angioplasty Revascularization Investigation (BARI). *J Am Coll Cardiol*. 2002; 39(4):565-572.	Includes both RCT and registry data
Bourassa MG, Kip KE, Jacobs AK et al. Is a strategy of intended incomplete percutaneous transluminal coronary angioplasty revascularization acceptable in nondiabetic patients who are candidates for coronary artery bypass graft surgery? The Bypass Angioplasty Revascularization Investigation (BARI). *J Am Coll Cardiol*. 1999; 33(6):1627-1636.	<30% with stable angina
Aoki J, Ong ATL, Hoye A et al. Five year clinical effect of coronary stenting and coronary artery bypass grafting in renal insufficient patients with multivessel coronary artery disease: Insights from ARTS trial. *Eur Heart J*. 2005; 26(15):1488-1493.	Patients with renal insufficiency
Srinivas VS, Brooks MM, Detre KM et al. Contemporary percutaneous coronary intervention versus balloon angioplasty for multivessel coronary artery disease: a comparison of the National Heart, Lung and	Comparison of RCT and registry data

Blood Institute Dynamic Registry and the Bypass Angioplasty Revascularization Investigation (BARI) study. *Circulation*. 2002; 106(13):1627-1633.	
Gibbons RJ, Miller DD, Liu P et al. Similarity of ventricular function in patients alive 5 years after randomization to surgery or angioplasty in the BARI trial. *Circulation*. 2001; 103(8):1076-1082.	Outcome not relevant- Ejection fraction
Jacobs AK, Kelsey SF, Brooks MM et al. Better outcome for women compared with men undergoing coronary revascularization: a report from the bypass angioplasty revascularization investigation (BARI). *Circulation*. 1998; 98(13):1279-1285.	Stable angina patients <30%
Kukreja N, Serruys PW, De BB et al. Sirolimus-eluting stents, bare metal stents or coronary artery bypass grafting for patients with multivessel disease including involvement of the proximal left anterior descending artery: analysis of the Arterial Revascularization Therapies study part 2 (ARTS-II). *Heart*. 2009; 95(13):1061-1066	Comparison of ARTS 1 vs. ART 2 results
Hlatky MA, Boothroyd D, Horine S et al. Employment after coronary angioplasty or coronary bypass surgery in patients employed at the time of revascularization. *Ann Intern Med*. 1998; 129(7):543-547.	Outcome- employment
Henderson RA. The Randomised Intervention Treatment of Angina (RITA) Trial protocol: a long term study of coronary angioplasty and coronary artery bypass surgery in patients with angina. *Br Heart J*. 1989; 62(5):411-414.	protocol
Vaina S, Voudris V, Morice MC et al. Effect of gender differences on early and mid-term clinical outcome after percutaneous or surgical coronary revascularisation in patients with multivessel coronary artery disease: insights from ARTS I and ARTS II. *Eurointervention*. 2009; 4(4):492-501	An ART 2 is a non randomised trial. Results reported for ARTS 1 in other paper.
Investigators BARI. The final 10-year follow-up results from the BARI randomized trial. *J Am Coll Cardiol*. 2007; 49(15):1600-1606.	64% unstable angina

Mullany CJ, Mock MB, Brooks MM et al. Effect of age in the Bypass Angioplasty Revascularization Investigation (BARI) randomized trial. *Ann Thorac Surg*. 1999; 67(2):396-403.	64% unstable angina
Berger PB, Velianou JL, Aslanidou V et al. Survival following coronary angioplasty versus coronary artery bypass surgery in anatomic subsets in which coronary artery bypass surgery improves survival compared with medical therapy: Results from the bypass angioplasty revascularization investigation (BARI). *J Am Coll Cardiol*. 2001; 38(5):1440-1449.	<60% stable angina
Schwartz L, Kip KE, Frye RL et al. Coronary bypass graft patency in patients with diabetes in the Bypass Angioplasty Revascularization Investigation (BARI). *Circulation*. 2002; 106(21):2652-2658.	64% unstable angina
Anon. Seven-year outcome in the Bypass Angioplasty Revascularization Investigation (BARI) by treatment and diabetic status. *J Am Coll Cardiol*. 2000; 35(5):1122-1129.	64% unstable angina
Ong AT, Serruys PW, Mohr FW et al. The SYNergy between percutaneous coronary intervention with TAXus and cardiac surgery (SYNTAX) study: design, rationale, and run-in phase. *Am Heart J*. 2006; 151(6):1194-1204.	Methods, designs paper
Stables RH. Design of the 'Stent or Surgery' trial (SoS): a randomized controlled trial to compare coronary artery bypass grafting with percutaneous transluminal coronary angioplasty and primary stent implantation in patients with multi-vessel coronary artery disease. *Semin Interv Cardiol*. 1999; 4(4):201-207.	Methods, designs paper
Zhang Z, Weintraub WS, Mahoney EM et al. Relative benefit of coronary artery bypass grafting versus stent-assisted percutaneous coronary intervention for angina pectoris and multivessel coronary disease in women versus men (one-year results from the Stent or Surgery trial). *Am J Cardiol*. 2004; 93(4):404-409.	Results reported in other paper (Ref ID 1049)
Kurbaan AS, Bowker TJ, Ilsley CD et al. Impact of postangioplasty restenosis on comparisons	Results reported in

of outcome between angioplasty and bypass grafting. Coronary Angioplasty versus Bypass Revascularisation Investigation (CABRI) Investigators. *Am J Cardiol*. 1998; 82(3):272-276.	paper Ref ID 1732
van den Brand MJ, Rensing BJ, Morel MA et al. The effect of completeness of revascularization on event-free survival at one year in the ARTS trial. *J Am Coll Cardiol*. 2002; 39(4):559-564.	Results reported in 3726
Barsness GW, Gersh BJ, Brooks MM et al. Rationale for the revascularization arm of the Bypass Angioplasty Revascularization Investigation 2 Diabetes (BARI 2D) Trial. *Am J Cardiol*. 2006; 97(12A):31G-40G.	Methodology paper
van Dijk D, Nierich AP, Eefting FD et al. The Octopus Study: rationale and design of two randomized trials on medical effectiveness, safety, and cost-effectiveness of bypass surgery on the beating heart. *Control Clin Trials*. 2000; 21(6):595-609.	Methodology paper
Brooks MM, Frye RL, Genuth S et al. Hypotheses, design, and methods for the Bypass Angioplasty Revascularization Investigation 2 Diabetes (BARI 2D) Trial. *Am J Cardiol*. 2006; 97(12A):9G-19G.	Methodology paper
Bourassa MG, Roubin GS, Detre KM et al. Bypass angioplasty revascularization investigation: Patient screening, selection, and recruitment. *Am J Cardiol*. 1995; *75*(9):3C-8C.	Methodology paper
Brooks MM, Detre KM. The design, patient population and outcomes from the Bypass Angioplasty Revascularization Investigation (BARI) randomized trial and registries. *Semin Interv Cardiol*. 1999; 4(4):191-199.	Methodology paper
Taggart DP. PCI or CABG in coronary artery disease? *Lancet*. 2009; 373(9670):1150-1152.	Review article
Kimura T, Morimoto T, Furukawa Y et al. Long-term outcomes of coronary-artery bypass graft surgery versus percutaneous coronary intervention for multivessel coronary artery disease in the bare-metal stent era.	Registry

Circulation. 2008; 118(141 suppl):199-209.	
Javaid A, Steinberg DH, Buch AN et al. Outcomes of coronary artery bypass grafting versus percutaneous coronary intervention with drug-eluting stents for patients with multivessel coronary artery disease. *Circulation*. 2007; 116(Suppl):I200-I206.	40% unstable angina. Stable angina % not reported.
Gruberg L, Milo S, Ben TM et al. Comparison of bypass surgery and stenting for the treatment of multivessel disease: results from the ARTS trial in Israel. *Israel Medical Association Journal*. 2003; 5(8):539-542.	No randomisation
Diegeler A, Thiele H, Falk V et al. Comparison of stenting with minimally invasive bypass surgery for stenosis of the left anterior descending coronary artery. *N Engl J Med*. 2002; 347(8):561-566.	% stable angina patients not reported
Ekstein S, Elami A, Merin G et al. Balloon angioplasty versus bypass grafting in the era of coronary stenting. *Israel Medical Association Journalj*. 2002; 4(8):583-589.	Non RCT
Hassan SA, Hlatky MA, Boothroyd DB et al. Outcomes of noncardiac surgery after coronary bypass surgery or coronary angioplasty in the Bypass Angioplasty Revascularization Investigation (BARI). *Am J Med*. 2001; 110(4):260-266.	Outcomes not relevant
Kurbaan AS, Bowker TJ, Ilsley CD et al. The effect of adjusting for baseline risk factors and post revascularisation coronary disease on comparisons between coronary angioplasty and bypass surgery. *Int J Cardiol*. 2001; 77(2-3):207-214.	Outcomes not relevant
Rodriguez A, Bernardi V, Navia J et al. Argentine Randomized Study: Coronary Angioplasty with Stenting versus Coronary Bypass Surgery in patients with Multiple-Vessel Disease (ERACI II): 30-day and one-year follow-up results. ERACI II Investigators. *J Am Coll Cardiol*. 2001; 37(1):51-58.	92% unstable angina
Feit F, Brooks MM, Sopko G et al. Long-term clinical outcome in the Bypass Angioplasty Revascularization Investigation Registry: comparison with the randomized trial. BARI Investigators. *Circulation*. 2000;	Registry

101(24):2795-2802.	
Pepine CJ, Bourassa MG, Chaitman BR et al. Factors influencing clinical outcomes after revascularization in the asymptomatic cardiac ischemia pilot (ACIP). ACIP Study Group. *J Card Surg*. 1999; 14(1):1-8.	Outcomes not relevant
Farquhar D. Bypass surgery or stenting for multivessel coronary artery disease? *Can Med Assoc J*. 2001; 164(12):1742.	Abstract
Frye RL, Alderman EL, Andrews K et al. Comparison of coronary bypass surgery with angioplasty in patients with multivessel disease: The Bypass Angioplasty Revascularization Investigation (BARI) investigators. *N Engl J Med*. 1996; 335(4):217-225.	30% stable angina patients
Frye RL. Influence of diabetes on 5-year mortality and morbidity in a randomized trial comparing CABG and PTCA in patients with multivessel disease: The bypass angioplasty revascularization investigation (BARI). *Circulation*. 1997; 96(6):1761-1769.	64% unstable angina
Frye RL. Five-year clinical and functional outcome comparing bypass surgery and angioplasty in patients with multivessel coronary disease: A multicenter randomized trial. *Journal of the American Medical Association*. 1997; 277(9):715-721.	30% stable angina patients
Holper EM, Brooks MM, Kim LJ et al. Effects of Heart Failure and Diabetes Mellitus on Long-Term Mortality After Coronary Revascularization (from the BARI Trial). *Am J Cardiol*. 2007; 100(2):-202.	76% unstable angina
Lee MS, Kapoor N, Jamal F et al. Comparison of coronary artery bypass surgery with percutaneous coronary intervention with drug-eluting stents for unprotected left main coronary artery disease. *J Am Coll Cardiol*. 2006; 47(4):864-870.	44% stable angina
Lombardero MS. Seven-year outcome in the bypass angioplasty revascularization investigation (BARI), by treatment and presence of diabetes. *Cardiovascular Reviews*	64% unstable angina

and Reports. 2002; 23(1):14-18.	
Rodriguez A, Rodriguez A, Baldi J et al. Survival may be similar in people with multiple vessel disease and significant proximal LAD stenosis receiving stents versus coronary artery bypass grafts. *Evidence-based Cardiovascular Medicine*. 2003; 7(2):73-based.	Abstract
Rodriguez A, Alemparte MR, Baldi J et al. Coronary stenting versus coronary bypass surgery in patients with multiple vessel disease and significant proximal LAD stenosis: Results from the ERACI II study. *Heart*. 2003; 89(2):184-188.	90% unstable angina
Rogers WJ, Alderman EL, Chaitman BR et al. Bypass Angioplasty Revascularization Investigation (BARI): Baseline clinical and angiographic data. *Am J Cardiol*. 1995; 75(9):9C-17C.	64% unstable angina
Rupprecht HJ, Hamm C, Ischinger T et al. Angiographic follow-up results of a randomized study on angioplasty versus bypass surgery (GABI Trial). *Eur Heart J*. 1996; 17(8):1192-1198.	Outcomes not relevant
Beatt KJ. RITA trial protocol. *Br Heart J*. 1990; 64(1):105.	Letter to the editor
Starkey IR. The RITA trial. *Lancet*. 1993; 341(8851):1020.	Article
Kukreja N, Serruys PW, De BB et al. Sirolimus-eluting stents, bare metal stents or coronary artery bypass grafting for patients with multivessel disease including involvement of the proximal left anterior descending artery: analysis of the Arterial Revascularization Therapies study part 2 (ARTS-II). *Heart*. 2009; 95(13):1061-1066.	Non RCT
Latib A, Chieffo A, Colombo A. Impact of optimal medical therapy and percutaneous coronary intervention on patients with stable angina. *Nature Clinical Practice Cardiovascular Medicine*. 2009; 6(2):92-93.	Article on COURAGE
Schwartz L, Kip KE, Alderman E et al. Baseline coronary angiographic findings in the Bypass Angioplasty Revascularization Investigation 2 Diabetes trial (BARI 2D). *Am J Cardiol*. 2009;	Angiographic findings

103(5):632-638.	
Thiele H, Neumann SP, Jacobs S et al. Randomized comparison of minimally invasive direct coronary artery bypass surgery versus sirolimus-eluting stenting in isolated proximal left anterior descending coronary artery stenosis. *J Am Coll Cardiol*. 2009; 53(25):2324-2331.	Stable angina % not reported
Rodriguez AE, Baldi J, Fernandez PC et al. Five-year follow-up of the Argentine randomized trial of coronary angioplasty with stenting versus coronary bypass surgery in patients with multiple vessel disease (ERACI II). *J Am Coll Cardiol*. 2005; 46(4):582-588.	90% unstable angina
Srinivas VS, Brooks MM, Detre KM et al. Contemporary percutaneous coronary intervention versus balloon angioplasty for multivessel coronary artery disease: a comparison of the National Heart, Lung and Blood Institute Dynamic Registry and the Bypass Angioplasty Revascularization Investigation (BARI) study. *Circulation*. 2002; 106(13):1627-1633.	Registry data
Brennan FJ. A randomized trial of multivessel stent versus coronary bypass. *J Am Coll Cardiol*. 2001; 38(1):286-287.	Article
Anon. Seven-year outcome in the Bypass Angioplasty Revascularization Investigation (BARI) by treatment and diabetic status. *J Am Coll Cardiol*. 2000; 35(5):1122-1129.	64% unstable angina
Weaver WD, Reisman MA, Griffin JJ et al. Optimum percutaneous transluminal coronary angioplasty compared with routine stent strategy trial (OPUS-1): a randomised trial. *Lancet*. 2000; 355(9222):2199-2203.	70% unstable angina
Daemen J, Kuck KH, Macaya C et al. Multivessel coronary revascularization in patients with and without diabetes mellitus: 3-year follow-up of the ARTS-II (Arterial Revascularization Therapies Study-Part II) trial. *J Am Coll Cardiol*. 2008; 52(24):1957-1967.	Non RCT
Zhao XQ, Kosinski AS, Barnhart HX et al. Prediction of native coronary artery disease	Outcomes not relevant

progression following PTCA or CABG in the Emory Angioplasty Versus Surgery Trial. *Medical Science Monitor*. 2003; 9(2):CR48-CR54.	
Carrie D, Elbaz M, Puel J et al. Five-year outcome after coronary angioplasty versus bypass surgery in multivessel coronary artery disease: Results from the French monocentric study. *Circulation*. 1997; 96(9 SUPPL.):II1-II6.	Study reports- Few patients presented with stable angina, whereas the majority complained of unstable angina or recent MI.
Massoudy P, Thielmann M, Lehmann N et al. Impact of prior percutaneous coronary intervention on the outcome of coronary artery bypass surgery: a multicenter analysis. *Journal of Thoracic & Cardiovascular Surgery*. 2009; 137(4):840-845.	Cohort study
Lytle BW, Block PC. PCI or CABG - Which is better for the patient? *ACC Cardiosource Review Journal*. 2006; 15(7):16-19.	Abstract
Rodriguez A. Argentine randomized study: coronary angioplasty with stenting vs coronary artery bypass surgery in patients with multiple-vessel disease (ERACI 11):30-day and long-term follow up results. *Am Heart J*. 2000; 139(2:part 1):362-363.	Abstract
Kapoor JR, Gienger AL, Ardehali R et al. Isolated disease of the proximal left anterior descending artery comparing the effectiveness of percutaneous coronary interventions and coronary artery bypass surgery. *Journal of the American College of Cardiology: Cardiovascular Interventions*. 2008; 1(5):483-491.	Review
Athappan G, Vinodhkumaradithyaa A, Srinivasan M et al. Meta-analysis of 5-year outcomes of CABG vs PCI with stenting in patients with multivessel disease. *Minerva Cardioangiol*. 2008; 56(5):453-460.	Meta analysis
Daemen J, Boersma E, Flather M et al. Long-term safety and efficacy of percutaneous coronary intervention with stenting and coronary artery bypass surgery for multivessel coronary artery disease: a meta-analysis with 5-year patient-level data from the ARTS, ERACI-II, MASS-II, and SoS trials. *Circulation*.	Meta analysis

2008; 118(11):1146-1154.	
Cecil WT, Kasteridis P, Barnes JW, Jr. et al. A meta analysis update: percutaneous coronary interventions. *Am J Manag Care*. 2008; 14(8):521-528.	Meta analysis
Takagi H, Kawai N, Umemoto T. Meta-analysis of four randomized controlled trials on long-term outcomes of coronary artery bypass grafting versus percutaneous coronary intervention with stenting for multivessel coronary artery disease. *Am J Cardiol*. 2008; 101(9):1259-1262.	Meta analysis
Kim C, Redberg RF, Pavlic T et al. A systematic review of gender differences in mortality after coronary artery bypass graft surgery and percutaneous coronary interventions. *Clin Cardiol*. 2007; 30(10):491-495.	Systematic review
Taggart DP. Coronary artery bypass graft vs. percutaneous coronary angioplasty: CABG on the rebound? *Curr Opin Cardiol*. 2007; 22(6):517-523.	Review
Bainbridge D, Cheng D, Martin J et al. Does off-pump or minimally invasive coronary artery bypass reduce mortality, morbidity, and resource utilization when compared with percutaneous coronary intervention? A meta-analysis of randomized trials. *Journal of Thoracic & Cardiovascular Surgery*. 2007; 133(3):623-631.	Meta analysis
Morrison D. PCI versus CABG versus medical therapy in 2006. *Minerva Cardioangiol*. 2006; 54(5):643-672.	Review
Caines AE, Massad MG, Kpodonu J et al. Outcomes of coronary artery bypass grafting versus percutaneous coronary intervention and medical therapy for multivessel disease with and without left ventricular dysfunction. *Cardiology*. 2004; 101(1-3):21-28.	Review
Biondi-Zoccai GG, Abbate A, Agostoni P et al. Stenting versus surgical bypass grafting for coronary artery disease: systematic overview and meta-analysis of randomized trials. *Italian Heart Journal*. 2003; 4(4):271-280.	Meta analysis

Ledford CS, Grines CL. Percutaneous coronary intervention versus coronary artery bypass grafting: clinical outcomes in multivessel coronary artery disease. *J Intervent Cardiol*. 2002; 15(4):315-320.	Review
Kalynych AM, King SB. PTCA versus CABG for angina pectoris: a look at the randomized trials. *Coron Artery Dis*. 1995; 6(10):788-796.	Review
Benedetto U, Melina G, Angeloni E et al. Coronary artery bypass grafting versus drug-eluting stents in multivessel coronary disease. A meta-analysis on 24,268 patients. *Eur J Cardiothorac Surg*. 2009; 36(4):611-617.	Meta analysis
Schomig A, Mehilli J, de WA et al. A meta-analysis of 17 randomized trials of a percutaneous coronary intervention-based strategy in patients with stable coronary artery disease. *J Am Coll Cardiol*. 2008; 52(11):894-904.	Meta analysis
Aziz O, Rao C, Panesar SS et al. Meta-analysis of minimally invasive internal thoracic artery bypass versus percutaneous revascularisation for isolated lesions of the left anterior descending artery. *Br Med J*. 2007; 334(7594):617.	Meta analysis
Cook S, Windecker S. Surgical versus percutaneous revascularization of coronary artery disease in diabetic patients. *Best Practice & Research Clinical Endocrinology & Metabolism*. 2009; 23(3):317-334.	Review
Loponen P, Luther M, Korpilahti K et al. HRQoL after coronary artery bypass grafting and percutaneous coronary intervention for stable angina. *Scand Cardiovasc J*. 2009; 43(2):94-99.	Non RCT
Soran O, Manchanda A, Schueler S. Percutaneous coronary intervention versus coronary artery bypass surgery in multivessel disease: a current perspective. *Interactive Cardiovascular & Thoracic Surgery*. 2009; 8(6):666-671.	Review
Matzo M. Anginal pain relief in bypass surgery and in angioplasty. *Am J Nurs*. 2008; 108(8):73-74.	review

Kiernan TJ, Prasad A, Gersh BJ. Current indications for percutaneous coronary intervention for chronic stable angina: implications of the COURAGE Trial. *Reviews in Cardiovascular Medicine*. 2007; 8(4):234-239.	review
Jeremias A, Kaul S, Rosengart TK et al. The Impact of Revascularization on Mortality in Patients with Nonacute Coronary Artery Disease. *Am J Med*. 2009; 122(2):152-161.	Meta analysis
Bravata DM, Gienger AL, McDonald KM et al. Systematic review: the comparative effectiveness of percutaneous coronary interventions and coronary artery bypass graft surgery. *Ann Intern Med*. 2007; 147(10):703-716.	Systematic review
Sim I, Gupta M, McDonald K et al. A meta-analysis of randomized trials comparing coronary artery bypass grafting with percutaneous transluminal coronary angioplasty in multivessel coronary artery disease. *Am J Cardiol*. 1995; 76(14):1025-1029.	Meta analysis
Williams DO, Vasaiwala SC, Boden WE. Is Optimal Medical Therapy "Optimal Therapy" for Multivessel Coronary Artery Disease? Optimal Management of Multivessel Coronary Artery Disease. Circulation. 2010;	Article
Yamagata K, Kataoka Y, Kokubu N et al. A 3-year clinical outcome after percutaneous coronary intervention using sirolimus-eluting stent and off-pump coronary artery bypass grafting for the treatment of diabetic patients with multivessel disease. Circulation Journal. 2010; 74(4):671-678.	39% with stable angina in PCI and 59%in surgery group
Kapur A, Bartolini D, Finlay MC et al. The bypass angioplasty revascularization in type 1 and type 2 diabetes study: 5-year follow-up of revascularization with percutaneous coronary intervention versus coronary artery bypass grafting in diabetic patients with multivessel disease. Journal of Cardiovascular Medicine. 2010; 11(1):26-33.	<30% with stable angina
Alper BS. Evidence-based medicine. CABG increases freedom from angina more than PCI. *Clinical Advisor for Nurse Practitioners*. 2008;	Abstract

11(4):131.	

ASPIRIN/CLOPIDOGREL/TICLODIPINE

Included Studies

Study
Juul-Moller S, Edvardsson N, Jahnmatz B et al. Double-blind trial of aspirin in primary prevention of myocardial infarction in patients with stable chronic angina pectoris. Lancet. 1992; 340(8833):1421-1425
Ridker PM, Manson JE, Gaziano JM et al. Low-dose aspirin therapy for chronic stable angina. A randomized, placebo-controlled clinical trial. Ann Intern Med. 1991; 114(10):835-839.

Excluded studies

Study	Reasons for exclusion
Berger JS, Brown DL, Becker RC. Low-dose aspirin in patients with stable cardiovascular disease: a meta-analysis. [Review] [33 refs]. *Am J Med*. 43; 121(1):43-49.	Review
Tisdale JE. Antiplatelet therapy in coronary artery disease: review and update of efficacy studies. [Review] [47 refs]. *Am J Health Syst Pharm*. 1998; 55(Suppl 1):8-16.	Review
Eccles M, Freemantle N, Mason J. North of England evidence based guideline development project: guideline on the use of aspirin as secondary prophylaxis for vascular disease in primary care. North of England Aspirin Guideline Development Group.[see comment][erratum appears in BMJ 1998 Jun 6;316(7146):1733]. [Review] [124 refs]. *BMJ*. 1998; 316(7140):1303-1309.	Guideline
Berglund U, Lassvik C, Wallentin L. Effects of the platelet inhibitor ticlopidine on exercise tolerance in stable angina pectoris. *Eur Heart J*. 1987; 8(1):25-30.	Follow-up 8 weeks
Khurmi NS, Bowles MJ, Raftery EB. Are anti-platelet drugs of value in the management of patients with chronic stable angina? A study with ticlopidine. *Clin Cardiol*. 1986; 9(10):493-498.	Follow-up 4 weeks
Berglund U, von SH, Wallentin L. Effects of	Outcome not

ticlopidine of platelet function in men with stable angina pectoris. *Thrombosis & Haemostasis*. 1985; 54(4):808-812.	relevant (platelet aggregation)
Miwa K, Kambara H, Kawai C. Exercise-induced angina provoked by aspirin administration in patients with variant angina. *Am J Cardiol*. 1981; 47(6):1210-1214.	N=8
Passamani ER. Summary of ongoing clinical trials of platelet-active drugs in cardiovascular disease. *Circulation*. 1980; 62(6:Pt 2):V106-V110.	Review
Davis JW, Lewis HD, Jr., Phillips PE et al. Effect of aspirin on exercise-induced angina. *Clinical Pharmacology & Therapeutics*. 1978; 23(5):505-510.	N=13
Frishman WH, Christodoulou J, Weksler B et al. Aspirin therapy in angina pectoris: effects on platelet aggregation, exercise tolerance, and electrocardiographic manifestations of ischemia. *Am Heart J*. 1976; 92(1):3-10.	N=11
Baigent C, Sudlow C, Collins R et al. Collaborative meta-analysis of randomised trials of antiplatelet therapy for prevention of death, myocardial infarction, and stroke in high risk patients. *Br Med J*. 2002; 324(7329):71-86.	Review -relevant references noted
Bouvy ML, Heerdink ER, Klungel OH et al. Women with angina pectoris receive less antiplatelet treatment than men. *Br J Gen Pract*. 1999; 49(441):299-300.	Outcomes not relevant (no of patients treated with antiplatelet)
Burgstahler C, Geisler T, Lindemann S et al. Elevated coronary calcium scores are associated with higher residual platelet aggregation after clopidogrel treatment in patients with stable angina pectoris. *Int J Cardiol*. 2009; 135(1):132-135.	Outcome not relevant (platelet aggregation)
Khan H, Jan H, Hafizullah M. Study on clopidogrel in inhibition of platelet aggregation in suspected angina patients, treated with a daily dose of 75 mg of clopidogrel for 7 days. *Iranian Journal of Pharmaceutical Research*. 2009; 8(2):135-140.	Outcome not relevant (platelet aggregation)
Saha S, Berglund M, Sylven C et al. Clopidogrel inhibits platelet aggregation in patients on aspirin with stable chronic angina pectoris. *Int J Cardiol*.	Outcome not relevant (platelet aggregation)

2008; 123(2):-196.	
Winther K, Husted SE, Vissinger H. Low dose acetylsalicylic acid in the antithrombotic treatment of patients with stable angina pectoris and acute coronary syndromes (unstable angina pectoris and acute myocardial infarction). *Pharmacol Toxicol*. 1994; 74(3):141-147.	Review
Sullivan J, Amarshi N. Dual antiplatelet therapy with clopidogrel and aspirin. *Am J Health Syst Pharm*. 2008; 65(12):1134-1143.	Review
Knight CJ. Antiplatelet treatment in stable coronary artery disease. [Review] [16 refs]. *Heart*. 2003; 89(10):1273-1278.	Review
Ruzyllo W, Ponikowski P, Wilkins A et al. Clinical characteristics and methods of treatment of patients with stable coronary heart disease in the primary care settings--the results of the Polish, Multicentre Angina Treatment Pattern (ATP) study. *Int J Clin Pract*. 2004; 58(12):1127-1133.	Survey
Wallentin L, Varenhorst C, James S et al. Prasugrel achieves greater and faster P2Y12receptor-mediated platelet inhibition than clopidogrel due to more efficient generation of its active metabolite in aspirin-treated patients with coronary artery disease. *Eur Heart J*. 2008; 29(1):21-30.	Outcomes not relevant (platelet aggregation)
Widimsky P, Motovska Z, Simek S et al. Clopidogrel pre-treatment in stable angina: for all patients > 6 h before elective coronary angiography or only for angiographically selected patients a few minutes before PCI? A randomized multicentre trial PRAGUE-8.[see comment]. *Eur Heart J*. 2008; 29(12):1495-1503.	Patients undergoing elective coronary angiography
Antiplatelet Trialists' Collaboration. Collaborative overview of randomised trials of antiplatelet therapy--I: Prevention of death, myocardial infarction, and stroke by prolonged antiplatelet therapy in various categories of patients. Antiplatelet Trialists' Collaboration. *BMJ*. 1994; 308(6921):81-106.	Review
CAPRIE Steering Committee. A randomised, blinded, trial of clopidogrel versus aspirin in patients at risk of ischaemic events (CAPRIE). CAPRIE Steering Committee. *Lancet*. 1996;	No stable angina patients

348(9038):1329-1339.	
Collins R, MacMahon S. Reliable assessment of the effects of treatment on mortality and major morbidity, I: clinical trials. *Lancet*. 2001; 357(9253):373-380.	Review
Kelly JP, Kaufman DW, Jurgelon JM et al. Risk of aspirin-associated major upper-gastrointestinal bleeding with enteric-coated or buffered product. *Lancet*. 1996; 348(9039):1413-1416.	Patient population not relevant (patients with upper GI bleeding)
Derry S, Loke YK. Risk of gastrointestinal haemorrhage with long term use of aspirin: meta-analysis. *BMJ*. 2000; 321(7270):1183-1187.	Outcome not relevant (gastro intestinal haemorrhage)
Sbar S, Schlant RC. Dipyridamole in the treatment of angina pectoris. A double-blind evaluation. *Journal of the American Medical Association*. 1967; 201(11):865-867.	dipyridamole
Anon. A randomized, controlled trial of aspirin in persons recovered from myocardial infarction. *Journal of the American Medical Association*. 1980; 243(7):661-669.	33% of patients with angina
Chen WH, Cheng X, Lee PY et al. Aspirin Resistance and Adverse Clinical Events in Patients with Coronary Artery Disease. *Am J Med*. 2007; 120(7):631-635.	% of stable angina patients not reported.
Becker MC. Angina pectoris: a double blind study with dipyridamole. Journal of the Newark Beth Israel Hospital. 1967; 18:88-94.	Dipyridamole
Chesebro JH, Webster MW, Smith HC et al. Antiplatelet therapy in coronary disease progression: reduced infarction and new lesion formation. Circulation. 1989; 80(Suppl 2):266.	Abstract
Wirecki M. Treatment of angina pectoris with dipyridamole: a long-term double blind study. J Chronic Dis. 1967; 20(3):139-145.	Dipyridamole
Manson JE, Grobbee DE, Stampfer MJ et al. Aspirin in the primary prevention of angina pectoris in a randomized trial of United States physicians. *Am J Med*. 1990; 89(6):772-776.	Sub group analysis of the study – patients with chronic stable angina included in the review (Ref ID 392)

STATINS

Included studies

Study
Fabian E, Varga A, Picano E et al. Effect of simvastatin on endothelial function in cardiac syndrome X patients. *Am J Cardiol*. 2004; 94(5):652-655.
Kayikcioglu M, Payzin S, Yavuzgil O et al. Benefits of statin treatment in cardiac syndrome-X1.[see comment]. *Eur Heart J*. 2003; 24(22):1999-2005.

Excluded studies

Study	Reasons for exclusion
Baigent C, Keech A, Kearney PM et al. Efficacy and safety of cholesterol-lowering treatment: prospective meta-analysis of data from 90,056 participants in 14 randomised trials of statins. *Lancet*. 2005; 366(9493):1267-1278.	Meta analysis
Anon. Randomised trial of cholesterol lowering in 4444 patients with coronary heart disease: the Scandinavian Simvastatin Survival Study (4S). *Lancet*. 1994; 344(8934):1383-1389.	21% of participants with angina
Wilt VM, Gums JG. 'Isolated' low high-density lipoprotein cholesterol. *Ann Pharmacother*. 1997; 31(1):89-97.	review
Perrone-Filardi P, Corrado L, Brevetti G et al. Effects of AT1 receptor antagonism with candesartan on endothelial function in patients with hypertension and coronary artery disease. *J Clin Hypertens*. 2009; 11(5):260-265.	Outcomes outside remit
Murphy SA. Heart Institute of Japan Candesartan Randomized Trial for Evaluation in Coronary Artery Disease (HIJ-CREATE). *ACC Cardiosource Review Journal*. 2007; 16(12):77.	abstract
Baller D, Notohamiprodjo G, Gleichmann U et al. Improvement in coronary flow reserve determined by	N=23

	positron emission tomography after 6 months of cholesterol-lowering therapy in patients with early stages of coronary atherosclerosis. *Circulation*. 1999; 99(22):2871-2875.	
	Houghton JL, Pearson TA, Reed RG et al. Cholesterol lowering with pravastatin improves resistance artery endothelial function: report of six subjects with normal coronary arteriograms.[see comment]. *Chest*. 2000; 118(3):756-760.	N=6
	Deedwania PC, Hunninghake DB, Bays H. Effects of lipid-altering treatment in diabetes mellitus and the metabolic syndrome. *Am J Cardiol*. 2004; 93(11):18C-26c.	Patients with metabolic syndrome
	Barzilay JI, Jones CL, Davis BR et al. Baseline characteristics of the diabetic participants in the Antihypertensive and Lipid-Lowering Treatment to Prevent Heart Attack Trial (ALLHAT). *Diabetes Care*. 2001; 24(4):654-658.	Methodology paper
	Mochizuki S, Dahlof B, Shimizu M et al. Valsartan in a Japanese population with hypertension and other cardiovascular disease (Jikei Heart Study): a randomised, open-label, blinded endpoint morbidity-mortality study.[see comment]. *Lancet*. 2007; 369(9571):1431-1439.	No stable angina patients

ACE/ARB

Included studies

STUDY
Braunwald E, Domanski MJ, Fowler SE et al. Angiotensin-converting-enzyme inhibition in stable coronary artery disease.[see comment]. N Engl J Med. 2004; 351(20):2058-2068.
Yui Y, Sumiyoshi T, Kodama K et al. Nifedipine retard was as effective as angiotensin converting enzyme inhibitors in preventing cardiac events in high-risk hypertensive patients with diabetes and coronary artery disease: the Japan Multicenter Investigation for Cardiovascular Diseases-B (JMIC-B) subgroup analysis.[erratum appears in Hypertens Res. 2004 Sep;27(9):695]. Hypertension Research - Clinical & Experimental. 2004; 27(7):449-456.
Yui Y, Sumiyoshi T, Kodama K et al. Comparison of nifedipine retard with angiotensin converting enzyme inhibitors in Japanese hypertensive patients with coronary artery disease: the Japan Multicenter Investigation for Cardiovascular Diseases-B (JMIC-B) randomized trial. Hypertension Research - Clinical & Experimental. 2004; 27(3):181-191.
Klein WW, Khurmi NS, Eber B et al. Effects of benazepril and metoprolol OROS alone and in combination on myocardial ischemia in patients with chronic stable angina.[see comment]. J Am Coll Cardiol. 1990; 16(4):948-956.
Yusuf S, Sleight P, Pogue J et al. Effects of an angiotensin-converting-enzyme inhibitor, ramipril, on cardiovascular events in high-risk patients. The Heart Outcomes Prevention Evaluation Study Investigators. N Engl J Med. 2000; 342(3):145-153. Ref ID: 9093
Pitt B, O'Neill B, Feldman R et al. The QUinapril Ischemic Event Trial (QUIET): evaluation of chronic ACE inhibitor therapy in patients with ischemic heart disease and preserved left ventricular function.[see comment]. Am J Cardiol. 2001; 87(9):1058-1063.

Excluded Studies

Study	Reasons for exclusion
Hansen JF, Hagerup L, Sigurd B et al. Treatment with verapamil and trandolapril in patients with	N=14

congestive heart failure and angina pectoris or myocardial infarction. Am Heart J. 1997; 134(2 II):S48-S52.	
Black HR, Elliott WJ, Grandits G et al. Principal results of the Controlled Onset Verapamil Investigation of Cardiovascular End Points (CONVINCE) trial. Journal of the American Medical Association. 2003; 289(16):2073-2082.	Hypertensive patients
Ferrari R. Effects of angiotensin-converting enzyme inhibition with perindopril on left ventricular remodeling and clinical outcome: results of the randomized Perindopril and Remodeling in Elderly with Acute Myocardial Infarction (PREAMI) Study. Arch Intern Med. 2006; 166(6):659-666.	Participants were elderly patients with acute MI and preserved LV function.
Sica DA. New considerations relating to class effect with angiotensin-converting enzyme inhibitors--the PEACE study. J Clin Hypertens. 2005; 7(3):188-193.	Discussion of results of PEACE trial;
Daly CA, Fox KM, Remme WJ et al. The effect of perindopril on cardiovascular morbidity and mortality in patients with diabetes in the EUROPA study: results from the PERSUADE substudy.[see comment]. Eur Heart J. 2005; 26(14):1369-1378.	80 % of patients with no stable angina
Bertrand ME, Remme WJ, Fox KM et al. Effects of perindopril on long-term clinical outcome of patients with coronary artery disease and preserved left ventricular function. Int J Cardiol. 2007; 121(1):57-61.	% of patients with stable angina not reported.
Deckers JW, Goedhart DM, Boersma E et al. Treatment benefit by perindopril in patients with stable coronary artery disease at different levels of risk. Eur Heart J. 2006; 27(7):796-801.	% of patients with stable angina not reported.
Willenheimer R, Juul-Moller S, Forslund L et al. No effects on myocardial ischaemia in patients with stable ischaemic heart disease after treatment with ramipril for 6 months. Current Controlled Trials in Cardiovascular Medicine. 2001; 2(2):99-105.	% of patients with stable angina not reported.
Dagenais GR, Yusuf S, Bourassa MG et al. Effects of ramipril on coronary events in high-	4.5 years follow-up. Have

risk persons: results of the Heart Outcomes Prevention Evaluation Study. Circulation. 2001; 104(5):522-526.	reported the results of 5 years follow-up in the evidence review (Ref ID 9093)
Fox KM, EURopean trial On reduction of cardiac events with Perindopril in stable coronary Artery disease Investigators. Efficacy of perindopril in reduction of cardiovascular events among patients with stable coronary artery disease: randomised, double-blind, placebo-controlled, multicentre trial (the EUROPA study).[see comment]. Lancet. 2003; 362(9386):782-788.	81% of patients had no angina
Yui Y, Shinoda E, Kodama K et al. Nifedipine retard prevents hospitalization for angina pectoris better than angiotensin-converting enzyme inhibitors in hypertensive Japanese patients with previous myocardial infarction (JMIC-B substudy). J Hypertens. 2007; 25(10):2019-2026.	Hospitalisation data reported graphically.
Pepine CJ, Rouleau JL, Annis K et al. Effects of angiotensin-converting enzyme inhibition on transient ischemia: the Quinapril Anti-Ischemia and Symptoms of Angina Reduction (QUASAR) trial. J Am Coll Cardiol. 2003; 42(12):2049-2059.	Follow-up 8 weeks
Overlack A, Adamczak M, Bachmann W et al. ACE-inhibition with perindopril in essential hypertensive patients with concomitant diseases. The Perindopril Therapeutic Safety Collaborative Research Group. Am J Med. 1994; 97(2):126-134.	Follow-up 6 weeks
Pfeffer MA, Domanski M, Rosenberg Y et al. Prevention of events with angiotensin-converting enzyme inhibition (the PEACE study design). Prevention of Events with Angiotensin-Converting Enzyme Inhibition. Am J Cardiol. 1998; 82(3A):25H-30H.	Methodology paper
Hsia J, Jablonski KA, Rice MM et al. Sudden cardiac death in patients with stable coronary artery disease and preserved left ventricular	Outcomes outside remit (baseline predictors of

systolic function. Am J Cardiol. 2008; 101(4):457-461. Ref ID: 28	sudden cardiac death)
Saha SA, Molnar J, Arora RR. Tissue ACE inhibitors for secondary prevention of cardiovascular disease in patients with preserved left ventricular function: a pooled meta-analysis of randomized placebo-controlled trials. Journal of Cardiovascular Pharmacology & Therapeutics. 2007; 12(3):192-204. Ref ID: 38	Review
Dagenais GR, Pogue J, Fox K et al. Angiotensin-converting-enzyme inhibitors in stable vascular disease without left ventricular systolic dysfunction or heart failure: a combined analysis of three trials. Lancet. 2006; 368(9535):581-588. Ref ID: 64	Review
Chaitman BR, Ivleva AY, Ujda M et al. Antianginal efficacy of omapatrilat in patients with chronic angina pectoris. Am J Cardiol. 2005; 95(11):1283-1289. Ref ID: 98	Follow-up 4 weeks
Neal B, MacMahon S, Ohkubo T et al. Effects of the vasopeptidase inhibitor, omapatrilat, in 723 patients with coronary heart disease. Journal of the Renin-Angiotensin-Aldosterone System. 2002; 3(4):270-276. Ref ID: 173	Patients with MI or unstable angina
Kalus JS, White CM. Amlodipine versus Angiotensin-receptor blockers for nonhypertension indications. Ann Pharmacother. 2002; 36(11):1759-1766. Ref ID: 175	Review
Prisant LM. Verapamil revisited: a transition in novel drug delivery systems and outcomes. Heart Disease. 2001; 3(1):55-62. Ref ID: 183	Review
Gomma AH, Fox KM. The EUROPA trial: design, baseline demography and status of the substudies. Cardiovascular Drugs & Therapy. 2001; 15(2):169-179. Ref ID: 190	Methodology paper
Ozcelik F, Altun A, Ozbay G. Antianginal and anti-ischemic effects of nisoldipine and ramipril in patients with syndrome X. Clin Cardiol. 1999; 22(5):361-365. Ref ID: 219	N=18
Fox KM, Henderson JR, Bertrand ME et al. The European trial on reduction of cardiac events with perindopril in stable coronary artery	Methodology paper

disease (EUROPA). Eur Heart J. 1998; 19 Suppl J:J52-5, 1998 Sep.:J52-J55. Ref ID: 227	
Nalbantgil I, Onder R, Altintig A et al. Therapeutic benefits of cilazapril in patients with syndrome X. Cardiology. 1998; 89(2):130-133. Ref ID: 235	N=18
Murohara T, Tayama S, Tabuchi T et al. Effects of angiotensin-converting enzyme inhibitor alacepril in patients with stable effort angina during chronic isosorbide dinitrate treatment. Am J Cardiol. 1996; 77(14):1159-1163. Ref ID: 256	N=13
Pepine CJ. Ongoing clinical trials of angiotensin-converting enzyme inhibitors for treatment of coronary artery disease in patients with preserved left ventricular function. J Am Coll Cardiol. 1996; 27(5):1048-1052. Ref ID: 259	Article on ongoing trials
Steffensen R, Grande P, Madsen JK et al. Short-term effects of captopril on exercise tolerance in patients with chronic stable angina pectoris and normal left ventricular function. Cardiology. 1995; 86(6):445-450. Ref ID: 264	N=18
Kaski JC, Rosano G, Gavrielides S et al. Effects of angiotensin-converting enzyme inhibition on exercise-induced angina and ST segment depression in patients with microvascular angina. J Am Coll Cardiol. 1994; 23(3):652-657. Ref ID: 280	N=10
Ikram H, Low CJ, Shirlaw TM et al. Angiotensin converting enzyme inhibition in chronic stable angina: effects on myocardial ischaemia and comparison with nifedipine. Br Heart J. 1994; 71(1):30-33. Ref ID: 281	2 weeks treatment
Muiesan ML, Boni E, Castellano M et al. Effects of transdermal nitroglycerin in combination with an ACE inhibitor in patients with chronic stable angina pectoris. Eur Heart J. 1993; 14(12):1701-1708. Ref ID: 285	N=24; Follow-up 4 weeks
Dhawan S, Soni D, Chandra N et al. Use of captopril as an isolated agent for the management of stable angina pectoris--a double blind randomised trial. Indian Heart J. 1992; 44(3):151-154. Ref ID: 296	Follow-up 6 weeks

	Tzivoni D, Gottlieb S, Khurmi NS et al. Effect of benazepril on myocardial ischaemia in patients with chronic stable angina pectoris. Eur Heart J. 1992; 13(8):1129-1134. Ref ID: 299	N=20
	Metelitsa VI, Martsevich SY, Kozyreva MP et al. Enhancement of the efficacy of isosorbide dinitrate by captopril in stable angina pectoris. Am J Cardiol. 1992; 69(4):291-296. Ref ID: 301	N=14
	Schneeweiss A, Marmor AT, Rettig SG. Anti-ischemic effects of cilazapril in patients with both hypertension and angina pectoris. Preliminary report of a pilot study. Cardiology. 1991; 79(1):46-48. Ref ID: 303	N=12
	Akhras F, Jackson G. The role of captopril as single therapy in hypertension and angina pectoris. Int J Cardiol. 1991; 33(2):259-266. Ref ID: 305	N=18
	Cleland JG, Henderson E, McLenachan J et al. Effect of captopril, an angiotensin-converting enzyme inhibitor, in patients with angina pectoris and heart failure. J Am Coll Cardiol. 1991; 17(3):733-739. Ref ID: 310	N=18
	Strozzi C, Cocco G, Portaluppi F et al. Effects of captopril on the physical work capacity of normotensive patients with stable-effort angina pectoris. Cardiology. 1987; 74(3):226-228. Ref ID: 320	N=12
	Meluzin J, Novak M, Rihacek I et al. Enalapril, diltiazem and their combination in patients with stable angina pectoris and left ventricular dysfunction treated with nitrates. Scripta Medica Facultatis Medicae Universitatis Brunensis Masarykianae. 1996; 69(1-2):27-2. Ref ID: 327	N=19
	Hansen JF, Tingsted L, Rasmussen V et al. Verapamil and angiotensin-converting enzyme inhibitors in patients with coronary artery disease and reduced left ventricular ejection fraction. Am J Cardiol. 1996; 77(16):16D-21D. Ref ID: 331	N=14
	Fox KM. Management of coronary artery disease: Implications of the EUROPA trial. British Journal of Cardiology. 2004;	Review

11(3):195-204. Ref ID: 530	
Furberg CD, Wright J, Davis BR et al. Major outcomes in high-risk hypertensive patients randomized to angiotensin-converting enzyme inhibitor or calcium channel blocker vs diuretic: The antihypertensive and lipid-lowering treatment to prevent heart attack trial (ALLHAT). Journal of the American Medical Association. 2002; 288(23):2981-2997. Ref ID: 533	Hypertensive patients
Gemici K, Kazazoglu AR, Yesilbursa D et al. The effects of sublingual administration of captopril on parameters of exercise test and neurohormonal activation in patients with stable angina pectoris. International Journal of Angiology. 1998; 7(3):238-243. Ref ID: 535	Assessment immediately after administration of the drug
Granger CB. Trandolapril did not reduce cardiovascular death or other events in stable coronary artery disease. Evidence-Based Medicine. 2005; 10(3):78. Ref ID: 543	Abstract
Hughes S. EUROPA study results: Perindopril benefits broad range of patients with stable coronary disease. British Journal of Cardiology. 2003; 10(5):339-340. Ref ID: 557	Abstract
Maruyama Y, Masaki N, Sato S et al. Effect of angiotensin converting enzyme inhibitors and beta-blockers on left ventricular remodeling after coronary artery bypass graft surgery. International Heart Journal. 2008; 49(4):385-390. Ref ID: 603	Outcomes outside remit (end diastolic volume index, ejection fraction)
Nissen SE, Tuzcu EM, Libby P et al. Effect of antihypertensive agents on cardiovascular events in patients with coronary disease and normal blood pressure. The CAMELOT study: A randomized controlled trial. Journal of the American Medical Association. 2004; 292(18):2217-2226. Ref ID: 630	Hypertensive patients (only 8% with class 4 angina)
Rouleau JL, Warnica WJ, Baillot R et al. Effects of angiotensin-converting enzyme inhibition in low-risk patients early after coronary artery bypass surgery. Circulation. 2008; 117(1):24-31. Ref ID: 673	% of stable angina patients not reported.
Russell SJ, Di S, Naffati MT et al. The effects of the angiotensin II receptor (type I) antagonist irbesartan in patients with cardiac syndrome X.	Follow-up 3 weeks

Heart. 2007; 93(2):253-254. Ref ID: 674	
Strozzi C, Cocco G, Portaluppi F. Ergometric evaluation of the effects of captopril in hypertensive patients with stable angina. J Hypertens. 1985; 3(SUPPL. 2):S147-S148. Ref ID: 700	N=12
Strozzi C, Cocco G, Portaluppi F. Ergometric evaluation of the effects of captopril in hypertensive patients with stable angina. Current Therapeutic Research - Clinical and Experimental. 1987; 41(3):301-Clinical. Ref ID: 702	N=12
Taddei S, Grassi G. Reconsidering the treatment of patients with coronary artery disease: A new possibility from CAMELOT. High Blood Pressure and Cardiovascular Prevention. 2005; 12(2):67-72. Ref ID: 706	Review
Taylor R. How large studies may mislead: The HOPE study. Practical Diabetes International. 2001; 18(6):208-211. Ref ID: 708	Review
van Gilst W, Warnica JW, Baillot R et al. Angiotensin-converting enzyme inhibition in patients with coronary artery disease and preserved left ventricular function. Ischemia Management with Accupril post-bypass graft via inhibition of angiotensin-converting enzyme (IMAGINE) compared with the other major trials in coronary artery disease. Am Heart J. 2006; 151(6):1240-1246. Ref ID: 721	Review
Wright J, Dunn JK, Cutler JA et al. Outcomes in hypertensive black and nonblack patients treated with chlorthalidone, amlodipine, and lisinopril. Journal of the American Medical Association. 2005; 293(13):1595-1608. Ref ID: 736	Hypertensive patients
Zaiem A, Zannad F. Perindopril: Beyond lowering blood pressure. Future Cardiology. 2008; 4(3):219-235. Ref ID: 742	Review
Kanadasi M, Demir M, Demirtas M et al. Effects of lisinopril, atenolol, and isosorbide 5-mononitrate on angina pectoris and QT dispersion in patients with syndrome X: An open-label, randomized, crossover study. Current Therapeutic Research, Clinical &	Follow-up 8 weeks

Experimental. 2002; 63(4):273-283. Ref ID: 811	
Vakulovskaya MK, Metelitsa VI, Martsevich Y. The ability of captopril and perindopril to potentiate antianginal activity of isosorbide dinitrate during long-term use in patients with ischemic heart disease and stable effort angina. Kardiologiya. 1995; 35(8):5-10. Ref ID: 896	Non English paper
Kumbhani DJ. Ischemia Management With Accupril Post-Bypass Graft via Inhibition of the Converting Enzyme (IMAGINE). ACC Cardiosource Review Journal. 2008; 17(4):11. Ref ID: 951	Abstract
Valles AY, Garibay VM. Efficacy of nifedipine GITS in combination with beta blockers in the management of exertional angina. Tijdschrift voor Therapie Geneesmiddel en Onderzoek. 1992; 17(Suppl):42-45. Ref ID: 4066	Non English paper
Frishman WH, Klein N, Strom J. Double-blind randomized placebo controlled crossover comparison of propranolol and verapamil in patients with angina pectoris and systemic hypertension. Am J Cardiol. 1982; 49(4 II):930. Ref ID: 6513	Abstract
Kondo J, Sone T, Tsuboi H et al. Effects of low-dose angiotensin II receptor blocker candesartan on cardiovascular events in patients with coronary artery disease. Am Heart J. 2003; 146(6):E20. Ref ID: 9045	Abstract
Bangalore S, Messerli FH, Cohen JD et al. Verapamil-sustained release-based treatment strategy is equivalent to atenolol-based treatment strategy at reducing cardiovascular events in patients with prior myocardial infarction: an INternational VErapamil SR-Trandolapril (INVEST) substudy. Am Heart J. 2008; 156(2):241-247. Ref ID: 9046	43% with Angina
Bertrand ME, Fox KM, Remme WJ et al. Angiotensin-converting enzyme inhibition with perindopril in patients with prior myocardial infarction and/or revascularization: a subgroup analysis of the EUROPA trial. Archives of Cardiovascular Diseases. 2009; 102(2):89-96. Ref ID: 9047	Sub group analysis of patients who had prior MI or had revascularisation (Angina patients <60%)

	Simon J, Gibbs R, Crean PA et al. The variable effects of angiotensin converting enzyme inhibition on myocardial ischaemia in chronic stable angina. Br Heart J. 1989; 62(2):112-117. Ref ID: 9048	N=12
	Solomon SD, Rice MM, Jablonski A et al. Renal function and effectiveness of angiotensin-converting enzyme inhibitor therapy in patients with chronic stable coronary disease in the Prevention of Events with ACE inhibition (PEACE) trial. Circulation. 2006; 114(1):26-31. Ref ID: 9050	Outcomes outside remit (renal function)
	Sabatine MS, Morrow DA, Jablonski KA et al. Prognostic significance of the Centers for Disease Control/American Heart Association high-sensitivity C-reactive protein cut points for cardiovascular and other outcomes in patients with stable coronary artery disease. Circulation. 2007; 115(12):1528-1536. Ref ID: 9051	Prognostic significance of c-reactive protein.
	Lee RT. The PEACE study: limiting the role of angiotensin-converting enzyme inhibitors in stable coronary artery disease. Current Atherosclerosis Reports. 2005; 7(3):211-212. Ref ID: 9052	Clinical trials report
	Ferrari R. Optimizing the treatment of hypertension and stable coronary artery disease: clinical evidence for fixed-combination perindopril/amlodipine. Current Medical Research & Opinion. 2008; 24(12):3543-3557. Ref ID: 9053	Review
	Curran MP, McCormack PL, Simpson D. Perindopril: a review of its use in patients with or at risk of developing coronary artery disease. Drugs. 2006; 66(2):235-255. Ref ID: 9055	Review
	Ferrari R, Fox K. Insight into the mode of action of ACE inhibition in coronary artery disease: the ultimate 'EUROPA' story. Drugs. 2009; 69(3):265-277. Ref ID: 9056	Review
	Lai C, Onnis E, Orani E et al. Effects of enalapril in normotensive patients with stable effort angina: a double blind, placebo controlled study. Drugs Under Experimental & Clinical Research. 1990; 16(6):299-305. Ref	N=8

ID: 9057	
Chocron S, Baillot R, Rouleau JL et al. Impact of previous percutaneous transluminal coronary angioplasty and/or stenting revascularization on outcomes after surgical revascularization: insights from the imagine study. Eur Heart J. 2008; 29(5):673-679. Ref ID: 9059	Intervention not relevant for the review
Ferrari R, Bertrand ME, Remme WJ et al. Insight into ACE inhibition in the prevention of cardiac events in stable coronary artery disease: the EUROPA trial. Expert Review of Cardiovascular Therapy. 2007; 5(6):1037-1046. Ref ID: 9060	Review
Brugts JJ, Ferrari R, Simoons ML. Angiotensin-converting enzyme inhibition by perindopril in the treatment of cardiovascular disease. Expert Review of Cardiovascular Therapy. 2009; 7(4):345-360. Ref ID: 9061	Review
Leenen FH, Nwachuku CE, Black HR et al. Clinical events in high-risk hypertensive patients randomly assigned to calcium channel blocker versus angiotensin-converting enzyme inhibitor in the antihypertensive and lipid-lowering treatment to prevent heart attack trial.[see comment]. Hypertension. 2006; 48(3):374-384. Ref ID: 9062	% of angina patients not reported
Os I, Franco V, Kjeldsen SE et al. Effects of losartan in women with hypertension and left ventricular hypertrophy: results from the Losartan Intervention for Endpoint Reduction in Hypertension Study. Hypertension. 2008; 51(4):1103-1108. Ref ID: 9063	Hypertensive patients
Anon. Adding ACE inhibitor doesn't improve outcomes in stable angina and normal LVEF. J Fam Pract. 2005; 54(2):109-113. Ref ID: 9067	Synopsis
van Mieghem W. Prevention of major cardiovascular events with an angiotensin-converting enzyme inhibitor or an angiotensin receptor blocker early or late after stroke. J Hypertens. 2009; 27:S26-S31. Ref ID: 9069	Patients with stroke
Kim KH, Jeong MH, Cho SH et al. Clinical effects of calcium channel blocker and Angiotensin converting enzyme inhibitor on endothelial function and arterial stiffness in patients with angina pectoris. J Korean Med	Outcomes outside remit (Brachail ankle PWV, Heart femoral

Sci. 2009; 24(2):223-231. Ref ID: 9070	PWV)
Krysiak R, Okopien B. Pleiotropic effects of angiotensin-converting enzyme inhibitors in normotensive patients with coronary artery disease. Pharmacological Reports: PR. 2008; 60(4):514-523. Ref ID: 9076	Outcomes outside remit (plasma levels of LDL, fibrinogen)
Campbell DJ. A review of Perindopril in the reduction of cardiovascular events. Vascular Health & Risk Management. 2006; 2(2):117-124. Ref ID: 9077	Review
Diaz A, Ducharme A. Update on the use of trandolapril in the management of cardiovascular disorders. Vascular Health & Risk Management. 2008; 4(6):1147-1158. Ref ID: 9078	Review
Gibas M, Miszczak SJ, Madry E et al. Influence of preventive therapy with quinapril on IL-6 level in patients with chronic stable angina. Pharmacological Reports: PR. 2007; 59(3):330-338. Ref ID: 9080	Outcomes outside remit (total cholesterol, HDL-cholesterol ratio)
Yusuf S, Wittes J, Probstfield J et al. Analysis and interpretation of treatment effects in subgroups of patients in randomized clinical trials. Journal of the American Medical Association. 1991; 266(1):93-98. Ref ID: 9088	Review
Mouaz H, Al-Mallah MH, Tleyjeh IM et al. Angiotensin-converting enzyme inhibitors in coronary artery disease and preserved left ventricular systolic function: a systematic review and meta-analysis of randomized controlled trials. J Am Coll Cardiol. 2006; 47(8):1576-1583. Ref ID: 9094	Review
Dahlof B, Devereux RB, Kjeldsen SE et al. Cardiovascular morbidity and mortality in the Losartan Intervention For Endpoint reduction in hypertension study (LIFE): a randomised trial against atenolol. Lancet. 2002; 359(9311):995-1003. Ref ID: 9095	Hypertensive patients
Julius S, Kjeldsen SE, Weber M et al. Outcomes in hypertensive patients at high cardiovascular risk treated with regimens based on valsartan or amlodipine: the VALUE randomised trial. Lancet. 2004; 363(9426):2022-2031. Ref ID:	Hypertensive patients

9096	
Brown MJ, Palmer CR, Castaigne A et al. Morbidity and mortality in patients randomised to double-blind treatment with a long-acting calcium-channel blocker or diuretic in the International Nifedipine GITS study: Intervention as a Goal in Hypertension Treatment (INSIGHT). Lancet. 2000; 356(9227):366-372. Ref ID: 9097	Hypertensive patients
Yusuf S, Teo K, Anderson C et al. Effects of the angiotensin-receptor blocker telmisartan on cardiovascular events in high-risk patients intolerant to angiotensin-converting enzyme inhibitors: a randomised controlled trial. Lancet. 2008; 372(9644):1174-1183. Ref ID: 9098	Follow-up 3 weeks, 37% stable angina patients
Verdecchia P, Reboldi G, Angeli F et al. Angiotensin-converting enzyme inhibitors and calcium channel blockers for coronary heart disease and stroke prevention. Hypertension. 2005; 46(2):386-392. Ref ID: 9099	Review
Bussman WD, Wittig RA, Brunner I et al. Quinapril in the treatment of Angina Pectoris. J Cardiovasc Pharmacol. 1992; 20(Suppl B):S67-S70.	N=16
Lees RS, Pitt B, Chan RC et al. Baseline clinical and angiographic data in the Quinapril Ischemic Event (QUIET) Trial. Am J Cardiol. 1996; 78(9):1011-1016.	Methodology paper
Kasanuki H, Hagiwara N, Hosoda S et al. Angiotensin II receptor blocker-based vs. non-angiotensin II receptor blocker-based therapy in patients with angiographically documented coronary artery disease and hypertension: the Heart Institute of Japan Candesartan Randomized Trial for Evaluation in Coronary Artery Disease (HIJ-CREATE). Eur Heart J. 2009; 30(10):1203-1212.	Not reported % of stable angina patients in the study.
Bertrand ME, Ferrari R, Remme WJ et al. Clinical synergy of perindopril and calcium-channel blocker in the prevention of cardiac events and mortality in patients with coronary artery disease. Post hoc analysis of the EUROPA study. Am Heart J. 2010; 159(5):795-802.	81% with no stable angina

RISK SCORES/MODELS

Included Studies

Study
Clayton, T. C., et al. "Risk score for predicting death, myocardial infarction, and stroke in patients with stable angina, based on a large randomised trial cohort of patients." British Medical Journal 331.7521 (2005): 869-72.
Daly, C. A., et al. "Predicting prognosis in stable angina--results from the Euro heart survey of stable angina: prospective observational study." BMJ 332.7536 (2006): 262-67.

Excluded studies

Study	Reasons for exclusion
Gardner, S. C., et al. "Risk factors for intermediate-term survival after coronary artery bypass grafting." Annals of Thoracic Surgery 72.6 (2001): 2033-37.	Risk factors for survival after CABG
Demoulin, J. C., M. Bertholet, and M. Chevigne. "Prognostic significance of electrocardiographic findings in angina at rest. Therapeutic implications." British Heart Journal 46.3 (1981): 320-24.	No risk score
Bolibar, I., et al. "Short-term prognostic value of lipid measurements in patients with angina pectoris." Thrombosis and Haemostasis 84.6 (2000): 955-60.	No risk score
Rehnqvist, N., et al. "Ventricular arrhythmias and other base-line data in 790 patients followed for angina pectoris. Prognostic value and therapeutic implications. Report from APSIS." New	No risk score

Trends in Arrhythmias 9.4 (1993): 1169-73.	
Trevisan, M., et al. "Syndrome X and mortality: a population-based study. Risk Factor and Life Expectancy Research Group." American Journal of Epidemiology 148.10 (1998): 958-66.	Patients with metabolic syndrome X
Lanza, G. A., et al. "Current clinical features, diagnostic assessment and prognostic determinants of patients with variant angina." International Journal of Cardiology 118.1 (2007): 41-47.	Patients with variant angina
Bugiardini, R., et al. "Angina, "normal" coronary angiography, and vascular dysfunction: risk assessment strategies. [Review] [40 refs]." PLoS Medicine / Public Library of Science 4.2 (2007): e12.	Article
Ang, D. S., et al. "Development and validation of a clinical score to identify echocardiographic left ventricular hypertrophy in patients with cardiovascular disease." American Journal of Hypertension 21.9 (2008): 1011-17.	Validation of a clinical risk score for patients with peripheral arterial disease
Dalal, J. N. and A. C. Jain. "Chronic stable angina pectoris: Risk stratification and treatment." Postgraduate Medicine 91.4 (1992): 165-76.	Article
Dunder, K., et al. "Cardiovascular risk factors for stable angina pectoris versus unheralded myocardial infarction." American Heart Journal 147.3 (2004): 502-08.	Not relevant to the question

Weiner, D. A., et al. "The predictive value of anginal chest pain as an indicator of coronary disease during exercise testing." American Heart Journal 96.4 (1978): 458-62.	Review
Hultgren, H. N. and P. Peduzzi. "Relation of severity of symptoms to prognosis in stable angina pectoris." American Journal of Cardiology 54.8 (1984): 988-93.	Not relevant to the question
Cohn, P. F., et al. "Prognostic importance of anginal symptoms in angiographically defined coronary artery disease." American Journal of Cardiology 47.2 (1981): 233-37.	Not relevant to the question
Helfant, R. H. "Stable angina pectoris. Risk stratification and therapeutic options." Circulation 82.3 SUPPL. (1990): II.	Not relevant to the question
Hagman, M., et al. "Risk factors for angina pectoris in a population study of Swedish men." Journal of Chronic Diseases 40.3 (1987): 265-75.	Not relevant to the question. No risk score.
Madhavan, S., H. Cohen, and M. H. Alderman. "Angina pectoris by Rose questionnaire does not predict cardiovascular disease in treated hypertensive patients." Journal of Hypertension 13.11 (1995): 1307-12.	Not relevant to the question
Terkelsen, C. J. and W. Vach. "Can risk score models help in reducing serious outcome events in patients with stable angina?" BMJ 331.7521	Article

(2005): 872.	
Pieri, P. L. "Clinical decision making in patients with stable anginal symptoms: Combining functional assessment with morphology to guide treatment." European Journal of Nuclear Medicine and Molecular Imaging 32.12 (2005): 1360-62.	Article
Hagman, M., et al. "Factors of importance for prognosis in men with angina pectoris derived from a random population sample. The Multifactor Primary Prevention Trial, Gothenburg, Sweden." American Journal of Cardiology 61.8 (1988): 530-35.	Individual risk actors
Lehmann, R., et al. "Favorable long-term survival in patients undergoing stent PCI of unprotected left main coronary artery compared to predicted short-term prognosis of CABG estimated by EuroSCORE: clinical determinants of long-term outcome." Journal of Interventional Cardiology 22.4 (2009): 311-19.	Patients with lesion of unprotected left main coronary artery

Prognostic tests

Included Studies

Study
Stratmann, H. G., L. T. Younis, and B. Kong. "Prognostic value of dipyridamole thallium-201 scintigraphy in patients with stable chest pain." American Heart Journal 123.2 (1992): 317-23.
Forslund, L., et al. "Prognostic implications of results from exercise testing in patients with chronic stable angina pectoris treated with metoprolol or verapamil. A report from the Angina Prognosis Study In Stockholm (APSIS)."

European Heart Journal 21.11 (2000): 901-10.

Conti, C. R., et al. "Anginal status and prediction of cardiac events in patients enrolled in the asymptomatic cardiac ischemia pilot (ACIP) study. ACIP investigators." The American journal of cardiology 79.7 (1997): 889-92.

Elhendy, A., et al. "Prognostic value of exercise echocardiography in patients with classic angina pectoris." American Journal of Cardiology 94.5 (2004): 559-63.

D'Andrea, A., et al. "Risk stratification and prognosis of patients with known or suspected coronary artery disease by use of supine bicycle exercise stress echocardiography." Italian Heart Journal: Official Journal of the Italian Federation of Cardiology 6.7 (2005): 565-72.

Forslund, L., et al. "Prognostic implications of ambulatory myocardial ischemia and arrhythmias and relations to ischemia on exercise in chronic stable angina pectoris (the Angina Prognosis Study in Stockholm [APSIS])." American Journal of Cardiology 84.10 (1999): 1151-57.

Stratmann, H. G., et al. "Prognostic value of dipyridamole technetium-99m sestamibi myocardial tomography in patients with stable chest pain who are unable to exercise." American Journal of Cardiology 73.9 (1994): 647-52.

Vanzetto, G., et al. "Long-term additive prognostic value of thallium-201 myocardial perfusion imaging over clinical and exercise stress test in low to intermediate risk patients : study in 1137 patients with 6-year follow-up." Circulation 100.14 (1999): 1521-27.

Wiersma, J. J., et al. "Prognostic value of myocardial perfusion scintigraphy in type 2 diabetic patients with mild, stable angina pectoris." Journal of Nuclear Cardiology 16.4 (2009): 524-32.

Elhendy, A., et al. "Risk stratification of patients with angina pectoris by stress 99mTc-tetrofosmin myocardial perfusion imaging." Journal of Nuclear Medicine 46.12 (2005): 2003-08.

Stratmann, H. G., et al. "Exercise technetium-99m sestamibi tomography for cardiac risk stratification of patients with stable chest pain." Circulation 89.2 (1994): 615-22.

Groutars, R. G., et al. "Incremental prognostic value of myocardial SPET with dual-isotope rest (201)Tl/stress (99m)Tc-tetrofosmin." European Journal of Nuclear Medicine and Molecular Imaging 29.1 (2002): 46-52.

Lima, R. S., et al. "Incremental prognostic value of myocardial perfusion 99m-technetium-sestamibi SPECT in the elderly." International Journal of Cardiology 93.2-3 (2004): 137-43.

Bigi R, Cortigiani L, Bax JJ et al. Stress echocardiography for risk stratification

of patients with chest pain and normal or slightly narrowed coronary arteries. J Am Soc Echocardiogr. 2002; 15(10:Pt 2):t-9.
Sekhri N, Feder GS, Junghans C et al. Incremental prognostic value of the exercise electrocardiogram in the initial assessment of patients with suspected angina: Cohort study. BMJ. 2008; 337(7681):1272-1275.
Poornima, I. G., et al. "Utility of myocardial perfusion imaging in patients with low-risk treadmill scores." Journal of the American College of Cardiology 43.2 (2004): 194-99.

Excluded studies

Study	Reasons for exclusion
Inaba, Y. and S. R. Bergmann. "Prognostic value of myocardial metabolic imaging with BMIPP in the spectrum of coronary artery disease: A systematic review." Journal of Nuclear Cardiology 17.1 (2010): 61-70.	Review
Cordovil, A., et al. "Role of dobutamine-atropine stress echocardiography in prognostic evaluation of 300 women." Echocardiography 21.2 (2004): 113-18.	29% with angina
Hanashi, A., et al. "Usefulness of exercise thallium-201 imaging in evaluation of low- and high-risk groups in coronary artery disease patients with disappearance of anginal episodes by anti-anginal drug therapy." Japanese Heart Journal 39.5 (1998): 597-609.	Asymptomatic patients
Arad, Y., et al. "Prediction of coronary events with electron beam computed tomography." Journal of the American College of Cardiology 36.4 (2000): 1253-60.	Asymptomatic patients
Krone, R. J., et al. "Limited usefulness of exercise testing and thallium scintigraphy in evaluation of ambulatory patients several months after recovery from an acute coronary event: implications for management of stable coronary	MI or unstable angina patients

heart disease. Multicenter Myocardial Ischemia Research Group." Journal of the American College of Cardiology 24.5 (1994): 1274-81.	
Pandullo, C., et al. "Prognostic value of total ischemic burden in patients with stable ischemic heart disease." Giornale Italiano di Cardiologia 21.7 (1991): 735-43.	Patients recruited with history of MI more than 6 months prior to entry.
Hoque, A., et al. "Exercise echocardiography and thallium-201 single-photon emission computed tomography stress test for 5- and 10-year prognosis of mortality and specific cardiac events." Journal of the American Society of Echocardiography 15.11 (2002): 1326-34.	No stable angina patients
Forslund, L., et al. "Prognostic implications of results from exercise testing in patients with chronic stable angina pectoris treated with metoprolol or verapamil. A report from the Angina Prognosis Study In Stockholm (APSIS)." European Heart Journal 21.11 (2000): 901-10.	Prognostic implication of catecholamines and heart rate variability
Uebleis, C., et al. "Stable coronary artery disease: prognostic value of myocardial perfusion SPECT in relation to coronary calcium scoring--long-term follow-up." Radiology 252.3 (2009): 682-90.	Incremental value of coronary artery calcification scoring over SPECT
Nagueh, S. F. and W. A. Zoghbi. "Prognostic value of stress echocardiography in stable angina or after myocardial infarction. [Review] [28 refs]." Current Opinion in Cardiology 11.6 (1996): 627-34.	Review
Amanullah, A. M. "Diagnostic and prognostic value of myocardial perfusion imaging in patients with known or suspected stable coronary artery disease." Echocardiography 17.6 I (2000): 587-95.	Review

Parisi, A. F., P. M. Hartigan, and E. D. Folland. "Exercise thallium scintigraphy versus exercise electrocardiography for predicting survival in chronic stable angina." Cardiology Review 15.9 (1998): 31-34.	Exercise thallium vs. exercise electrocardiography
Burggraf, G. W. and J. O. Parker. "Prognosis in coronary artery disease. Angiographic, hemodynamic, and clinical factors." Circulation 51.1 (1975): 146-56.	Not relevant to the question
Rao, S., V. Lele, and R. D. Lele. "Prognostic value of 99mTc-Sestamibi stress Myocardial Perfusion Single Photon Emission Computed Tomography (SPECT) in ischemic heart disease." Journal of the Association of Physicians of India 53:1036-42, 2005 Dec. (2005): 1036-42.	Population with ischemic heart disease (prior CABG, PCI)
Alkeylani, A., et al. "Influence of race on the prediction of cardiac events with stress technetium-99m sestamibi tomographic imaging in patients with stable angina pectoris." American Journal of Cardiology 81.3 (1998): 293-97.	not relevant to the question (influence of race)
Machecourt, J., et al. "Prognostic value of thallium-201 single-photon emission computed tomographic myocardial perfusion imaging according to extent of myocardial defect. Study in 1,926 patients with follow-up at 33 months." Journal of the American College of Cardiology 23.5 (1994): 1096-106.	No incremental value
Forslund, L., et al. "Prognostic implications of autonomic function assessed by analyses of catecholamines and heart rate variability in stable angina pectoris." Heart 87.5 (2002): 415-22.	Not relevant to the question
Marwick, T. H. "Use of stress echocardiography for the prognostic assessment of patients	Review

with stable chronic coronary artery disease. [Review] [13 refs]." European Heart Journal 18 Suppl D:D97-101, 1997 Jun. (1997): D97-101.	
Zebrack, J. S., et al. "C-reactive protein and angiographic coronary artery disease: independent and additive predictors of risk in subjects with angina." Journal of the American College of Cardiology 39.4 (2002): 632-37.	Not relevant to the question
Metz, L. D., et al. "The prognostic value of normal exercise myocardial perfusion imaging and exercise echocardiography: a meta-analysis. [Review] [169 refs]." Journal of the American College of Cardiology 49.2 (2007): 227-37.	Meta analysis
Miller, D. D., et al. "Increased exercise thallium-201 lung uptake: A noninvasive prognostic index in two-vessel coronary artery disease." Canadian Journal of Cardiology 4.6 (1988): 270-76.	Number of angina patients not reported
Nagao, T., et al. "Quantitative gated single-photon emission computed tomography with (99m)Tc sestamibi predicts major cardiac events in elderly patients with known or suspected coronary artery disease: the QGS-Prognostic Value in the Elderly (Q-PROVE) Study." Circulation Journal 71.7 (2007): 1029-34.	No stable angina patients
Lauer, M. S., et al. "An externally validated model for predicting long-term survival after exercise treadmill testing in patients with suspected coronary artery disease and a normal electrocardiogram." Annals of Internal Medicine 147.12 (2007): 821-28.	1% patients with angina
Berman, D. S., et al. "Comparative use of radionuclide stress testing, coronary artery calcium scanning,	Review

and noninvasive coronary angiography for diagnostic and prognostic cardiac assessment. [Review] [84 refs]." Seminars in Nuclear Medicine 37.1 (2007): 2-16.	
Chen, L. C., et al. "Differential coronary calcification on electron-beam CT between syndrome X and coronary artery disease in patients with chronic stable angina pectoris." Chest 120.5 (2001): 1525-33.	Outcomes not relevant (coronary calcification)
Bruce, R. A., et al. "ST segment elevation with exercise: A marker for poor ventricular function and poor prognosis. Coronary Artery Surgery Study (CASS) confirmation of Seattle Heart Watch results." Circulation 77.4 (1988): 897-905.	Article
Shehata, A. R., et al. "Direct comparison of arbutamine and dobutamine stress testing with myocardial perfusion imaging and echocardiography in patients with coronary artery disease." The American journal of cardiology 80.6 (1997): 716-20.	Arbutamine and dobutamine stress testing vs. MP imaging and echo
Ricci, R., et al. "Prognostic value of echo-dobutamine test in patients with coronary artery disease: Comparisons with effort stress test." Giornale Italiano di Cardiologia 26.2 (1996): 187-99.	Paper not in English
Verani, M. S. "Thallium-201 single-photon emission computed tomography (SPECT) in the assessment of coronary artery disease. [Review] [31 refs]." American Journal of Cardiology 70.14 (1992): 3E-9E.	Test for Diagnosis
Appelman, Y. E., et al. "Evaluation of the long-term functional outcome assessed by myocardial perfusion scintigraphy following excimer laser angioplasty compared to balloon angioplasty in longer coronary lesions." International Journal of	Comparison of excimer angioplasty and balloon angioplasty

Cardiac Imaging 16.4 (2000): 267-77.	
Sorrentino, A. R., et al. "Comparison of the prognostic value of SPECT after nitrate administration and metabolic imaging by PET in patients with ischaemic left ventricular dysfunction." European Journal of Nuclear Medicine & Molecular Imaging 34.4 (2007): 558-62.	Patients with previous MI
Demoulin, J. C., M. Bertholet, and M. Chevigne. "Prognostic significance of electrocardiographic findings in angina at rest. Therapeutic implications." British Heart Journal 46.3 (1981): 320-24.	unstable angina patients
Johnson, B. D., et al. "Prognosis in women with myocardial ischemia in the absence of obstructive coronary disease: results from the National Institutes of Health-National Heart, Lung, and Blood Institute-Sponsored Women's Ischemia Syndrome Evaluation (WISE)." Circulation 109.24 (2004): 2993-99.	Not relevant to the question
Johansen, A., et al. "Use of myocardial perfusion imaging to predict the effectiveness of coronary revascularisation in patients with stable angina pectoris." European Journal of Nuclear Medicine & Molecular Imaging 32.12 (2005): 1363-70.	Not relevant outcomes and comparison
Langou, R. A., et al. "Predictive accuracy of coronary artery calcification and abnormal exercise test for coronary artery disease in asymptomatic men." Circulation 62.6 I (1980): 1196-203.	N=13. Exercise test vs. coronary artery calcification by Fluoroscopy
Pieri, P. L. "Clinical decision making in patients with stable anginal symptoms: Combining functional assessment with morphology to guide treatment." European Journal of Nuclear Medicine and Molecular	Article

Imaging 32.12 (2005): 1360-62.	
Arruda, A. L., et al. "Prognostic significance of ST-segment elevation during dobutamine stress echocardiography." American Heart Journal 151.3 (2006): 744.	Abstract
Dou, K. F., et al. "Clinical and angiographic characteristics of premenopausal women with coronary artery disease." Chinese Medical Journal 121.23 (2008): 2392-96.	Not relevant to the question
Bigi, R. and Chiara B. De. "Prognostic value of noninvasive stressing modalities in patients with chest pain and normal coronary angiogram. [Review] [47 refs]." Herz 30.1 (2005): 61-66.	Review
Berman, D. S. and R. Hachamovitch. "Risk assessment in patients with stable coronary artery disease: incremental value of nuclear imaging. [Review] [11 refs]." Journal of Nuclear Cardiology 3.6:Pt 2 (1996): t-9.	Review
Matsuki, T., et al. "Prognostic value of fatty acid imaging in patients with angina pectoris without prior myocardial infarction: comparison with stress thallium imaging." European Journal of Nuclear Medicine & Molecular Imaging 31.12 (2004): 1585-91.	47% patients with effort angina
Wake, R., et al. "Role of contrast-enhanced dobutamine stress echocardiography in predicting outcome in patients with known or suspected coronary artery disease." Echocardiography 23.8 (2006): 642-49.	Not clear if it is stable angina population.
Sanchis, J., et al. "Usefulness of early exercise testing and clinical risk score for prognostic evaluation in chest pain units without preexisting evidence of myocardial ischemia." American Journal of	Patients present with chest pain to emergency department

Cardiology 97.5 (2006): 633-35.	
Petix, N. R., et al. "Prognostic value of combined perfusion and function by stress technetium-99m sestamibi gated SPECT myocardial perfusion imaging in patients with suspected or known coronary artery disease." American Journal of Cardiology 95.11 (2005): 1351-57.	No stable angina population
Hofmann, T., A. Burmeister, and T. Meinertz. "Prognostic significance of the signal averaged electrocardiogram in patients with chronic stable coronary artery disease. Analysis in the time domain and by spectral temporal mapping." Zeitschrift fur Kardiologie 93.1 (2004): 32-42.	Stable angina population not reported.
Pundziute, G., et al. "Prognostic value of multislice computed tomography coronary angiography in patients with known or suspected coronary artery disease." Journal of the American College of Cardiology 49.1 (2007): 62-70.	Not reported % of angina population
Berman, D. S., et al. "Incremental value of prognostic testing in patients with known or suspected ischemic heart disease: a basis for optimal utilization of exercise technetium-99m sestamibi myocardial perfusion single-photon emission computed tomography." Journal of the American College of Cardiology 26.3 (1995): 639-47.	29% with angina
Iskandrian, A. S., et al. "Use of exercise thallium-201 imaging for risk stratification of elderly patients with coronary artery disease." American Journal of Cardiology 61.4 (1988): 269-72.	46% with typical angina
Weiner, D. A., et al. "Significance of silent myocardial ischemia during exercise testing in patients with coronary artery disease." American Journal of Cardiology 59.8 (1987):	No incremental value of exercise test

725-29.	
Rydberg, E., et al. "Left atrioventricular plane displacement determined by echocardiography: A clinically useful, independent predictor of mortality in patients with stable coronary artery disease." Journal of Internal Medicine 254.5 (2003): 479-85.	No incremental value of exercise test
Mulcahy, D., et al. "Ischemia during ambulatory monitoring as a prognostic indicator in patients with stable coronary artery disease." JAMA 277.4 (1997): 318-24.	No incremental value of exercise test
Mark, D. B., et al. "Exercise treadmill score for predicting prognosis in coronary artery disease." Annals of Internal Medicine 106.6 (1987): 793-800.	No incremental value of exercise test
Hoilund-Carlsen, P. F., et al. "High probability of disease in angina pectoris patients: Is clinical estimation reliable?" Canadian Journal of Cardiology 23.8 (2007): 641-47.	Outcomes not relevant
Weiner, D. A. "Prognostic significance of silent myocardial ischemia by exercise testing." Advances in Cardiology 37.pp 270-277 (1990): -277.	No incremental value of exercise test
Borges-Neto, S., et al. "Incremental prognostic power of single-photon emission computed tomographic myocardial perfusion imaging in patients with known or suspected coronary artery disease." American Journal of Cardiology 95.2 (2005): 182-88.	High risk population who had high rate of revacsularisatin and underwent cardiac catheterisation 36 months of their index SPECT study.
Mody, F. V., et al. "Severity of silent myocardial ischemia on ambulatory electrocardiographic monitoring in patients with stable angina pectoris: relation to prognostic determinants during exercise stress testing and	Not relevant to the question

coronary angiography." Journal of the American College of Cardiology 12.5 (1988): 1169-76.	
Mulcahy, D., et al. "Value of ambulatory ST segment monitoring in patients with chronic stable angina: does measurement of the "total ischaemic burden" assist with management?" British Heart Journal 67.1 (1992): 47-52.	No incremental value
Jelinek, M. V., et al. "Routine coronary angiography for effort angina." Medical Journal of Australia 154.12 (1991): 808-14.	Exercise test vs. coronary angiography
Cademartiri, F., et al. "Prognostic value of 64-slice coronary angiography in diabetes mellitus patients with known or suspected coronary artery disease compared with a nondiabetic population." Radiologia Medica 113.5 (2008): 627-43.	Not relevant to the question
Min, J. K., et al. "Prognostic value of multidetector coronary computed tomographic angiography for prediction of all-cause mortality." Journal of the American College of Cardiology 50.12 (2007): 1161-70.	Typical angina – 4-5%
Stone, P. H., et al. "Prognostic significance of myocardial ischemia detected by ambulatory electrocardiography, exercise treadmill testing, and electrocardiogram at rest to predict cardiac events by one year (the Asymptomatic Cardiac Ischemia Pilot [ACIP] study)." American Journal of Cardiology 80.11 (1997): 1395-401.	No incremental value of stress tests
Jeger, R. V., et al. "Prognostic value of stress testing in patients over 75 years of age with chronic angina." Chest 125.3 (2004): 1124-31.	No incremental value

Matsumoto, N., et al. "Prognostic value of non-obstructive CT low-dense coronary artery plaques detected by multislice computed tomography." Circulation Journal 71.12 (2007): 1898-903.	No stable angina patients
Shemesh, J., et al. "Usefulness of spiral computed tomography (dual-slice mode) for the detection of coronary artery calcium in patients with chronic atypical chest pain, in typical angina pectoris, and in asymptomatic subjects with prominent atherosclerotic risk factors." American Journal of Cardiology 87.2 (2001): 226-28.	No incremental value
Chikamori, T., et al. "Prognostic value of I-123 15-(p-iodophenyl)-3-(R,S) methylpentadecanoic acid myocardial imaging in patients with known or suspected coronary artery disease." Journal of Nuclear Cardiology 12.2 (2005): 172-78.	Not used in NHS
Coletta C, Galati A, Greco G et al. Prognostic value of high dose dipyridamole echocardiography in patients with chronic coronary artery disease and preserved left ventricular function. J Am Coll Cardiol. 1995; 26(4):887-894.	43% with chest pain
Pepine CJ, Sharaf B, Andrews TC et al. Relation between clinical, angiographic and ischemic findings at baseline and ischemia-related adverse outcomes at 1 year in the Asymptomatic Cardiac Ischemia Pilot study. ACIP Study Group. J Am Coll Cardiol. 1997; 29(7):1483-1489.	No incremental value
Hachamovitch R, Berman DS, Kiat H et al. Exercise myocardial perfusion SPECT in patients without known coronary artery disease: incremental prognostic value and use in risk stratification. Circulation.	30% with angina symptoms

1996; 93(5):905-914.	
Hachamovitch R, Berman DS, Kiat H et al. Value of stress myocardial perfusion single photon emission computed tomography in patients with normal resting electrocardiograms: an evaluation of incremental prognostic value and cost-effectiveness. Circulation. 2002; 105(7):823-829.	35% with angina symptoms
Hachamovitch R, Berman DS, Shaw LJ et al. Incremental prognostic value of myocardial perfusion single photon emission computed tomography for the prediction of cardiac death: differential stratification for risk of cardiac death and myocardial infarction. Circulation. 1998; 97(6):535-543.	35% with angina
Shaw LJ, Berman DS, Maron DJ et al. Optimal medical therapy with or without percutaneous coronary intervention to reduce ischemic burden: results from the Clinical Outcomes Utilizing Revascularization and Aggressive Drug Evaluation (COURAGE) trial nuclear substudy. Circulation. 2008; 117(10):1283-1291.	Not relevant to the question
Miller TD, Taliercio CP, Zinsmeister AR et al. Prognosis in patients with an abnormal exercise radionuclide angiogram in the absence of significant coronary artery disease. *J Am Coll Cardiol*. 1988; 12(3):637-641.	Does not evalaute prognostic value of angiogram
Ciaroni S, Bloch A, Hoffmann JL et al. Prognostic value of dobutamine echocardiography in patients with intermediate coronary lesions at angiography. *Echocardiography*. 2002; 19(7:Pt 1):t-53.	No incremental value
Amici E, Cortigiani L, Coletta C et al. Usefulness of pharmacologic stress echocardiography for the long-term prognostic assessment of patients	Not relevant to the question

with typical versus atypical chest pain. *Am J Cardiol*. 2003; 91(4):440-442.	
Colon PJ, III, Mobarek SK, Milani RV et al. Prognostic value of stress echocardiography in the evaluation of atypical chest pain patients without known coronary artery disease. *Am J Cardiol*. 1998; 81(5):545-551.	Not relevant population
Cannan CR, Miller TD, Christian TF et al. Prognosis with abnormal thallium images in the absence of significant coronary artery disease. *Am J Cardiol*. 1992; 70(15):1276-1280.	Does not report prognostic value of of thallium imaging
Haley JH, Miller TD, Christian TF et al. Twelve-year outcome of patients with an abnormal exercise radionuclide left ventricular angiogram and angiographically insignificant coronary artery disease. *Am J Cardiol*. 1998; 82(4):418-422.	Does not evalaute prognostic value of angiogram
Stratmann, H. G., L. T. Younis, and B. Kong. "Assessing cardiac risk of stable angina patients with dipyridamole thallium studies." Cardiology Board Review 10.2 (1993): 85-89.	Data for stepwise logistic regression analysis not reported
Nakajima, K., et al. "Prognostic value of myocardial perfusion and ventricular function in a Japanese multicenter cohort study (J-ACCESS): the first-year total events and hard events." Annals of Nuclear Medicine 23.4 (2009): 373-81.	46% patients with typical chest pain
Hashimoto, A., et al. "Incremental prognostic value of stress/rest gated perfusion SPECT in patients with coronary artery disease--subanalysis of the J-ACCESS study." Circulation Journal 73.12 (2009): 2288-93.	46% patients with typical chest pain
Chamuleau, S. A., et al. "Prognostic value of coronary blood flow	SPECT vs. CFCR (coronary blood

velocity and myocardial perfusion in intermediate coronary narrowings and multivessel disease." Journal of the American College of Cardiology 39.5 (2002): 852-58.	flow velocity)
Galassi, A. R., et al. "Incremental prognostic value of technetium-99m-tetrofosmin exercise myocardial perfusion imaging for predicting outcomes in patients with suspected or known coronary artery disease." American Journal of Cardiology 88.2 (2001): 101-06.	Results of multivariate cox proportional hazard analysis reported in graphs.
Iskandrian, A. S., et al. "Independent and incremental prognostic value of exercise single-photon emission computed tomographic (SPECT) thallium imaging in coronary artery disease." Journal of the American College of Cardiology 22.3 (1993): 665-70.	Data in figures
Johansen, A., et al. "Prognostic value of myocardial perfusion imaging in patients with known or suspected stable angina pectoris: evaluation in a setting in which myocardial perfusion imaging did not influence the choice of treatment." Clinical Physiology & Functional Imaging 26.5 (2006): 288-95.	CI not reported
Rocco, M. B., et al. "Prognostic importance of myocardial ischemia detected by ambulatory monitoring in patients with stable coronary artery disease." Circulation 78.4 (1988): 877-84.	No multivariate analysis (no incremental value)
Lemos, P. A., et al. "Prognostic heterogeneity among patients with chronic stable	Prognosis after treatment with PCI

coronary disease: Determinants of long-term mortality after treatment with percutaneous intervention." Eurointervention 5.2 (2009): 239-43.	
Castaner, A., et al. "Risk stratification and prognosis of patients with recent onset angina." European Heart Journal 11.10 (1990): 868-75.	Undtable angian

REHABILITATION FOR STABLE ANGINA

Included Studies

Study
Lewin RJ, Furze G, Robinson J et al. A randomised controlled trial of a self-management plan for patients with newly diagnosed angina. *Br J Gen Pract.* 2002; 52(476):194-201.
Tyni-Lenne R, Stryjan S, Eriksson B et al. Beneficial therapeutic effects of physical training and relaxation therapy in women with coronary syndrome X. *Physiother Res Int.* 2002; 7(1):35-43.
Eriksson BE, Tyni L, Svedenhag J et al. Physical training in Syndrome X: physical training counteracts deconditioning and pain in Syndrome X. *J Am Coll Cardiol.* 2000; 36(5):1619-1625
Cupples ME, McKnight A. Randomised controlled trial of health promotion in general practice for patients at high cardiovascular risk. *Br Med J.* 1994; 309(6960):993-996.
O'Neill C, Normand C, Cupples M et al. A comparison of three measures of perceived distress: results from a study of angina patients in general practice in Northern Ireland. *Journal of Epidemiology & Community Health.* 1996; 50(2):202-206 183.
Todd IC, Ballantyne D. Antianginal efficacy of exercise training: a comparison with beta blockade. *Br Heart J.* 1990; 64(1):14-19.
Jiang X, Sit JW, Wong TKS. A nurse-led cardiac rehabilitation programme improves health behaviours and cardiac physiological risk parameters:

evidence from Chengdu, China. *J Clin Nurs*. 2007; 16(10):1886-1897.

Amarosa-Tupler B, Tapp JT, Carida RV. Stress management through relaxation and imagery in the treatment of angina pectoris. *J Cardpulm Rehabil*. 1989; 9(9):348-355.

Bundy C, Carroll D, Wallace L et al. Psychological treatment of chronic stable angina pectoris. *Psychology & Health*. 1994; 10(1):69-77.

Gallacher JEJ, Hopkinson CA, Bennett P et al. Effect of stress management on angina. *Psychology & Health*. 1997; 12(4):523-532

Bundy C, Carroll D, Wallace L et al. Stress management and exercise training in chronic stable angina pectoris. *Psychology & Health*. 1998; 13(1):147-155.

Asbury EA, Slattery C, Grant A et al. Cardiac rehabilitation for the treatment of women with chest pain and normal coronary arteries. *Menopause*. 2008; 15(3):454-460.

Lewin RJ, Cay EL, Todd I et al. The Angina Management Programme: A rehabilitation treatment. *British Journal of Cardiology*. 1995; 2(8):221-226.

Malmborg RO, Isacsson SO, Kallivroussis G. The effect of beta blockade and-or physical training in patients with angina pectoris. *Current Therapeutic Research, Clinical & Experimental*. 1974; 16(3):171-183.

Retardation of coronary atherosclerosis with yoga lifestyle intervention. Journal of the Association of Physicians of India: 48: 687 - 694

Manchanda SC, Narang R, Reddy KS, Sachdeva U, Prabhakaran D, Dharmanand S, Rajani M, and Bijlani R.

2000

Ornish D, Scherwitz LW, Billings JH et al. Intensive lifestyle changes for reversal of coronary heart disease. *Journal of the American Medical Association*. 1998; 280(23):2001-2007.

Schuler G, Hambrecht R, Schlierf G et al. Regular physical exercise and low-fat diet. Effects on progression of coronary artery disease. *Circulation*. 1992; 86(1):1-11.

Potts SG, Lewin R, Fox KA et al. Group psychological treatment for chest pain with normal coronary arteries. *QJM*. 1999; 92(2):81-86.

Hambrecht R, Walther C, Mobius WS et al. Percutaneous coronary angioplasty compared with exercise training in patients with stable coronary artery disease: a randomized trial. *Circulation*. 2004; 109(11):1371-1378.

Zetta, S., et al. "Evaluating the Angina Plan in Patients Admitted to Hospital with Angina: A Randomized Controlled Trial." Cardiovasc.Ther. (2009).

Excluded Studies

Study	Reasons for exclusion
Ornish D, Scherwitz LW, Doody RS et al. Effects of stress management training and dietary changes in treating ischemic heart disease. *Journal of the American Medical Association*. 1983; 249(1):54-59.	Outcomes not relevant
Watkins LL, Sherwood A, Feinglos M et al. Effects of exercise and weight loss on cardiac risk factors associated with syndrome X. *Arch Intern Med*. 2003; 163(16):1889-1895.	Outcomes not relevant = lowering BP
Linxue L, Nohara R, Makita S et al. Effect of long-term exercise training on regional myocardial perfusion changes in patients with coronary artery disease. *Jpn Circ J*. 1999; 63(2):73-78.	21% with stable angina
Fujita M, Sasayama S, Asanoi H et al. Improvement of treadmill capacity and collateral circulation as a result of exercise with heparin pretreatment in patients with effort angina. *Circulation*. 1988; *77*(5):1022-1029.	N=16, comparison not relevant-exercise with or without heparin.
Schuler G, Schlierf G, Wirth A et al. Low-fat diet and regular, supervised physical exercise in patients with symptomatic coronary artery disease: reduction of stress-induced myocardial ischemia. *Circulation*. 1988; *77*(1):172-181.	N=18, no relevant outcomes
May GA, Nagle FJ. Changes in rate-pressure product with physical training of individuals with coronary artery disease.	Outcomes not relevant

Phys Ther. 1984; 64(9):1361-1366.	
Haskell WL, Alderman EL, Fair JM et al. Effects of intensive multiple risk factor reduction on coronary atherosclerosis and clinical cardiac events in men and women with coronary artery disease. The Stanford Coronary Risk Intervention Project (SCRIP). *Circulation*. 1994; 89(3):975-990.	No stable angina patients
Anon. Physical activity and cardiovascular health. NIH Consensus Development Panel on Physical Activity and Cardiovascular Health. *Journal of the American Medical Association*. 1996; 276(3):241-246.	Non-RCT
Nieuwland W, Berkhuysen MA, van Veldhuisen DJ et al. Differential effects of high-frequency versus low-frequency exercise training in rehabilitation of patients with coronary artery disease. *J Am Coll Cardiol*. 2000; 36(1):202-207.	10% patients with stable angina
Lewin RJ. Improving quality of life in patients with angina. *Heart*. 1999; 82(6):654-655.	Article
Kellermann JJ. Rationale of exercise therapy in patients with angina pectoris with normal and impaired ventricular function. *Chest*. 1992; 101(5 Suppl):322S-325S.	Article
Wosornu D, Bedford D, Ballantyne D. A comparison of the effects of strength and aerobic exercise training on exercise capacity and lipids after coronary artery bypass surgery. *Eur Heart J*. 1996; 17(6):854-863.	Not reported If they were stable angina patients

NHS Centre for Reviews and Dissemination. *Cardiac Rehabilitation. Effective Healthcare*. 4(4); 1-12. 1998.	Article
Froelicher V, Jensen D, Genter F et al. A randomized trial of exercise training in patients with coronary heart disease. *Journal of the American Medical Association*. 1984; 252(10):1291-1297.	47% angina
McLeod AA. Later management of documented ischaemic heart disease: Secondary prevention and rehabilitation. *Br Med Bull*. 2001; 59:113-133.	Article
Rees, K., Bennett, P., West, R., Davey, S. G., and Ebrahim, S. *Psychological interventions for coronary heart disease*. 2004.	Review. Relevant references full texts considered for inclusion.
Wosornu D, Bedford D, Ballantyne D. A comparison of the effects of strength and aerobic exercise training on exercise capacity and lipids after coronary artery bypass surgery. *Eur Heart J*. 1996; 17(6):854-863.	Not reported if they were stable angina patients
NHS Centre for Reviews and Dissemination. *Cardiac Rehabilitation. Effective Healthcare*. 4(4); 1-12. 1998.	CRD report
Oberman A, Fletcher GF, Lee J et al. Efficacy of high-intensity exercise training on left ventricular ejection fraction in men with coronary artery disease (the Training Level Comparison Study). *Am J Cardiol*. 1995; 76(10):643-647.	Not relevant comparison (Low intensity exercise vs. High intensity exercise)
Lewin RJ, Thompson DR, Martin CR, Stuckey N, Devlen J, Michaelson S, and Maguire P (2002) Validation of the Cardiovascular Limitations and Symptoms Profile (CLASP) in	Validation of the CLASP

chronic stable angina, *Journal of Cardiopulmonary Rehabilitation,* 22(3):184-91.	
Burke D, Williams A, and Lockyer L (2002) The development of a nurse-led angina management programme, *Professional Nurse,* 18(2):86-90.	Not – RCT
Myers J, Ahnve S, Froelicher V, Livingston M, Jensen D, Abramson I, Sullivan M, and Mortara D (1984) A randomized trail of the effects of 1 year of exercise training on computer-measured ST segment displacement in patients with coronary artery disease, *Journal of the American College of Cardiology,* 4(6):1094-102.	% of patients with stable angina not reported.
Ferguson RJ, C&#x00F4, t&#x00E9, P, Bourassa MG, and Corbara F (1979) Lidoflazine and physical training in the treatment of stable angina pectoris, *Clinical Cardiology,* 2(6):413-6.	Outcomes not relevant
Woods JH and Minniti MJ (1987) The relationship of stress management training to the experience of pain in clients with intractable angina, *Journal of Holistic Nursing,* 5(1):11-3.	N=10
Razin AM (1985) Psychotherapeutic intervention in angina: II. Implications for research and practice, *General Hospital Psychiatry,* 7(1):9-14.	Review
Appels A, van E, Bar F, van d, Erdman RAM, Assman M, Trijsburg W, van D, van D, and Pedersen SS (2006) Effects of a behavioural intervention on quality of life and related variables in angioplasty patients. Results of the	Indications for PCI – (stable angina) – 12% patients

Exhaustion Intervention Trial, *Journal of Psychosomatic Research,* 61(1):1-7.	
Lattanzio CN, Petrella RJ, and Suskin N (2000) Exercise programs for older patients with cardiac disease: A review of home- vs. institution-based interventions, *Cardiovascular Reviews & Reports,* 21(10):532-43	Review
Lewin RJ and Brodie DA (2000) Cardiac rehabilitation for refractory angina: Part two: Psychological aspects, *British Journal of Cardiology, 7*(4):221-2.	Article
McLeod AA (2001) Later management of documented ischaemic heart disease: Secondary prevention and rehabilitation, *British Medical Bulletin,* 59:113-33.	Article
Schroeder JS (2004) Emerging Therapies for Angina: New Modalities May Offer Additional Clinical Options, *Managed Care Interface,* 17(4):45-52.	Article
Harkapaa K and Hakkola M (1985) Changes in subjective chest pain after medical rehabilitation of patients with angina pectoris and myocardial infarction: a follow-up of in-patient and out-patient care, *International Journal of Rehabilitation Research,* 8(3 Suppl 4):48.	Abstract
Lisspers J, Sundin O, Hofman-Bang C, Nordlander R, Nygren A, Rydén L, and Ohman A (1999) Behavioral effects of a comprehensive, multifactorial program for lifestyle change after percutaneous transluminal coronary angioplasty: a	Not reported if patients were with stable angina.

prospective, randomized controlled study, *Journal of Psychosomatic Research,* 46(2):143-54.	
Menna J, Ferreiros E, and Saglietti JH (1977) Rehabilitation of different forms of coronary heart disease. A prospective randomized trial and follow up of three groups of patients, *Cardiology,* 62(2):109.	Abstract
Panwar RB, Agarwal DK, and Gupta R (2002) A novel cardiac rehabilitation program improves work performance in patients with stable coronary artery disease (abstract), *Indian Heart Journal, 54*(5):183.	Abstract
Sebrechts CP, Klein JL, Ahnve S, Froelicher VF, and Ashburn WL (1986) Myocardial perfusion changes following 1 year of exercise training assessed by thallium-201 circumferential count profiles, *American Heart Journal,* 112(6):1217-26.	Outcome not relevant (Myocardial Perfusion)
Walther C, Wolff A, Yu J, and Sick P (1999) Comparison of regular physical training with PTCA/stent in patients with stable coronary heart disease, *Zeitschrift Fur Kardiologie,* 88(Suppl 1):268.	Abstract not in English
Jennings C, Kotseva K, Connolly S, Mead A, Jones J, Holden A, De Bacquer D, De Backer G, and Wood D (2006) EuroAction: a nurse-led multidisciplinary cardiovascular prevention and rehabilitation hospital programme. 16-week results, *European Journal of Cardiovascular Nursing, 5*:S47-S48.	Abstract
[No authors listed] (1999) Patient education: Chronic stable	Patient education article

angina, *Nurse Practitioner,* 24(5):54-61	
McGillion M, Watt-Watson J, Stevens B, Lefort S, and Coyte P (2006) Impact of psychoeducation on the meaning of cardiac pain for people with chronic stable angina (abstract), *European Journal of Cardiovascular Nursing, 5*(suppl 1):S19-S20.	Abstract
Ness AR, shfield-Watt PAL, Whiting JM, Smith GD, Hughes J, and Burr ML (2004) The long-term effect of dietary advice on the diet of men with angina: the diet and angina randomized trial, *Journal of Human Nutrition & Dietetics,* 17(2):117-9.	May have to look in lifestyle inventions
Stubbe I, Gustafson A, and Nilsson-Ehle P (1983) In-hospital exercise therapy in patients with severe angina pectoris, *Archives of Physical Medicine & Rehabilitation,* 64(9):396-401.	N=14
Sykes CM, Nelson S, and Marshall K (2006) Patient satisfaction of the Angina Plan in a rapid access chest pain clinic, *British Journal of Cardiology,* 13(5):361-2.	N=21
Lewin RJ (1997) The psychological and 116ehavioural management of angina, *Journal of Psychosomatic Research,* 43(5):453-62.	Editional
West R (2003) Cardiac rehabilitation of older patients, *Reviews in Clinical Gerontology,* 13(3):241-55.	Review
Niebauer J, Hambrecht R, Marburger C, Hauer K, Velich T, von HE, Schlierf G, bler W, and Schuler G (1995) Impact of intensive physical exercise and low-fat diet on collateral vessel	Outcome not relevant

formation in stable angina pectoris and angiographically confirmed coronary artery disease, *American Journal of Cardiology,* 76(11):771-5.	
Thompson PD, Cullinane E, Lazarus B, and Carleton RA (1981) Effect of exercise training on the untrained limb exercise performance of men with angina pectoris, *American Journal of Cardiology,* 48(5):844-50.	N=13
Oldridge NB, McCartney N, Hicks A, and Jones NL (1989) Improvement in maximal isokinetic cycle ergometry with cardiac rehabilitation, *Medicine & Science in Sports & Exercise,* 21(3):308-12.	N=22
Hambrecht R, Niebauer J, Marburger C, Grunze M, Kalberer B, Hauer K, Schlierf G, Kubler W, and Schuler G (1993) Various intensities of leisure time physical activity in patients with coronary artery disease: effects on cardiorespiratory fitness and progression of coronary atherosclerotic lesions, *Journal of the American College of Cardiology,* 22(2):468-77.	Outcomes not relevant
Fletcher BJ, Dunbar SB, Felner JM, Jensen BE, Almon L, Cotsonis G, and Fletcher GF (1994) Exercise testing and training in physically disabled men with clinical evidence of coronary artery disease, *American Journal of Cardiology,* 73(2):170-4.	Not reported % of stable angina patients
Denollet J (1993) Emotional distress and fatigue in coronary heart disease: the Global Mood Scale (GMS), *Psychological Medicine,* 23(1):111-21.	Outcome – not relevant (emotional distress)

Campbell NC, Grimshaw JM, Ritchie LD, and Rawles JM (1996) Outpatient cardiac rehabilitation: are the potential benefits being realised?, *Journal of the Royal College of Physicians,* 30(6):514-9.	Not – RCT
Thompson DR and Bowman GS (1998) Evidence for the effectiveness of cardiac rehabilitation, *Intensive & Critical Care Nursing,* 14(1):38-48.	Article
Gagliardi JA, Prado NG, Marino JC, Lederer S, Ramos AO, and Bertolasi CA (1996) Exercise training and heparin pretreatment in patients with coronary artery disease, *American Heart Journal,* 132(5):946-51.	Heparin pre treatment
LaFontaine T (1995) The role of lipid management by diet and exercise in the progression, stabilization, and regression of coronary artery atherosclerosis, *Journal of Cardiopulmonary Rehabilitation,* 15(4):262-8.	Review
Ornish D, Brown SE, Scherwitz LW, Billings JH, Armstrong WT, Ports TA, McLanahan SM, Kirkeeide RL, Brand RJ, and Gould KL (1990) Can lifestyle changes reverse coronary heart disease? The Lifestyle Heart Trial, *Lancet,* 336(8708):129-33.	Results reported in Ref ID 120
NHS Centre for Reviews and Dissemination (1998) Cardiac Rehabilitation. *Effective Healthcare* 4(4):1-12.	Article
Berra K, Fletcher B, and Miller NH (2008) Chronic stable angina: Addressing the needs of patients through risk reduction, education and support, *Clinical & Investigative Medicine – Medecine Clinique Et*	A conference report

Experimentale, 31(6):E391-E399.	
Bundy C, Nagle R, and Wallace L (1989) Stress management training in chronic stable angina (abstract), *Clinical Rehabilitation,* 3:81.	Abstract
Frattaroli J, Weidner G, Merritt WT, Frenda S, and Ornish D (2008) Angina pectoris and atherosclerotic risk factors in the multisite cardiac lifestyle intervention program, *American Journal of Cardiology,* 101(7):911-8.	76% patients with n o angina
Gallagher R, McKinley S, and Dracup K (2003) Effects of a telephone 119ounselling intervention on psychosocial adjustment in women following a cardiac event, *Heart & Lung,* 32(2):79-87.	17.3% angina patients
McGillion M, Croxford R, Watt-Watson J, Lefort S, Stevens B, and Coyte P (2008) Cost of illness for chronic stable angina patients enrolled in a self-management education trial, *Canadian Journal of Cardiology,* 24(10):759-64.	Cost effectiveness paper
Zetta S, Jones M, and Smith K (2006) Randomised controlled trial comparing a self-help cognitive behavioural programme, the Angina Plan, with standard care for angina patients admitted to hospital (abstract), *European Journal of Cardiovascular Nursing, 5*(suppl 1):S49-S50.	Abstract
McGillion M, Watt-Watson J, Stevens B, Lefort S, and Coyte P (2007) Cost of illness for chronic stable angina (abstract), *Pain Research & Management,*	Abstract

12(2):136.	
Ma W and Teng Y (2005) Influence of cognitive and psychological intervention on negative emotion and severity of myocardial ischemia in patients with angina, *Chinese Journal of Clinical Rehabilitation,* 9(24):25-7.	Only abstract full text in Chinese
Lewin RJ, Furze G, Robinson J, Griffith K, Wiseman S, Pye M, and Boyle R (2002) A randomised controlled trial of a self-management plan for patients with newly diagnosed angina, *British Journal of General Practice,* 52(476):194-201.	Duplicate of 9191
Lewin RJ, Brodie DA. Cardiac rehabilitation for refractory angina: Part two: Psychological aspects. *British Journal of Cardiology*. 2000; 7(4):221-222.	Article
Kanji N, White AR, Ernst E. Autogenic training reduces anxiety after coronary angioplasty: a randomized clinical trial. *Am Heart J*. 2004; 147(3 ;e10):K1-K4.	% of stable angina patients not reported
Moore RK, Groves DG, Bridson JD et al. A brief cognitive-behavioral intervention reduces hospital admissions in refractory angina patients. *Journal of Pain & Symptom Management*. 2007; 33(3):310-316.	Non RCT, Refractory angina patients
Vale MJ, Jelinek MV, Best JD. Impact of coaching patients on coronary risk factors: Lessons from The COACH Program. *Disease Management & Health Outcomes*. 2005; 13(4):225-244.	No angina patients
Nurse-coordinated multidisciplinary, family-based cardiovascular disease	36% stable angina patients

prevention programme (EUROACTION) for patients with coronary heart disease and asymptomatic individuals at high risk of cardiovascular disease: a paired, cluster-randomised controlled trial. Lancet: 371: 1999 - 2012 Wood DA, Kotseva K, Connolly S, Jennings C, Mead A, Jones J, Holden A, De BD, Collier T, De BG, and Faergeman O. 14-6-2008	
Fujita M, Sasayama S, Kato K et al. Prospective, randomized, placebo-controlled, double-blind, multicenter study of exercise with enoxaparin pretreatment for stable-effort angina. *Am Heart J*. 1995; 129(3):535-541 1.	Exercise +enoxaparin vs. Exercise +placebo
McGillion M, Watt WJ, Lefort S et al. Positive shifts in the perceived meaning of cardiac pain following a psychoeducation program for chronic stable angina. *Can J Nurs Res*. 2007; 39(2):48-65.	Objective was to examine the meaning of cardiac pain for stable angina.
Lewin RJ, Furze G, Robinson J et al. Self management with the Angina Plan reduced anxiety, depression, angina attacks, and use of medication. *Evidence-Based Medicine*. 2003; 8(1):14.	Results reported in Ref ID 9191
A Psychoeducation Trial for People with Chronic Stable Angina. Michael H McGillion1; Judith H Watt-Watson1; Bonnie Stevens1; Sandra LeFort2; Peter	Abstract

Coyte3. Circulation. 2006;114:II_652	
McGillion M, Arthur H, Victor JC et al. Effectiveness of psychoeducational interventions for improving symptoms, health-related quality of life, and psychological well being in patients with stable angina. Current Cardiology Reviews. 2008; 4(1):1-11.	Systematic review
Jolly K, Bradley F, Sharp S et al. Follow-up care in general practice of patients with myocardial infarction or angina pectoris: initial results of the SHIP trial. Southampton Heart Integrated Care Project. Fam Pract. 1998; 15(6):548-555.	27.3% patients with angina. Involvement of nurses in a structured follow-up
Jolly K, Bradley F, Sharp S et al. Randomised controlled trial of follow up care in general practice of patients with myocardial infarction and angina: final results of the Southampton heart integrated care project (SHIP). The SHIP Collaborative Group. *BMJ*. 1999; 318(7185):706-711.	27.3% patients with angina. Involvement of nurses in a structured follow-up
Aldana SG, Whitmer WR, Greenlaw R et al. Cardiovascular risk reductions associated with aggressive lifestyle modification and cardiac rehabilitation. *Heart & Lung*. 2003; 32(6):374-382.	Patients with clinically confirmed myocardial infarction
Toobert DJ, Glasgow RE, Nettekoven LA et al. Behavioral and psychosocial effects of intensive lifestyle management for women with coronary heart disease. *Patient Educ Couns*. 1998; 35(3):177-188.	No angina patients

Erdman RAM, Duivenvoorden HJ, Verhage F. Predictability of beneficial effects in cardiac rehabilitation: A randomized clinical trial of psychosocial variables. *J Cardpulm Rehabil*. 1986; 6(6):206-213.	Patients with MI and severe angina pectoris
Taylor RS, Brown A, Ebrahim S et al. Exercise-based rehabilitation for patients with coronary heart disease: systematic review and meta-analysis of randomized controlled trials. *Am J Med*. 2004; 116(10):682-692.	Systematic review
Ballegaard, S., et al. "Long-term effects of integrated rehabilitation in patients with advanced angina pectoris: a nonrandomized comparative study." Journal of Alternative & Complementary Medicine 10.5 (2004): 777-83.	Poor quality Cohort study
Onishi T, Shimada K, Sato H et al. Effects of phase III cardiac rehabilitation on mortality and cardiovascular events in elderly patients with stable coronary artery disease. *Circulation Journal*. 2010; 74(4):709-714.	Not stable angina population. Patients were referred 6 months after ACS, CABG or PCI.

Lifestyle

Included Studies

Study
Anderson TW. Vitamin E in angina pectoris. *Can Med Assoc J*. 1974; 110(4):401-406.
Aucamp AK, Schoeman HS, Coetzee JH. Pilot trial to determine the efficacy of a low dose of fish oil in the treatment of angina pectoris in the geriatric patient. *Prostaglandins Leukotrienes & Essential Fatty Acids*. 1993; 49(3):687-689.
Burr ML, Ashfield-Watt PA, Dunstan FD et al. Lack of benefit of dietary advice

to men with angina: results of a controlled trial. *Eur J Clin Nutr*. 2003; *57*(2):193-200.
Gillilan RE, Mondell B, Warbasse JR. Quantitative evaluation of vitamin E in the treatment of angina pectoris. *Am Heart J*. 1977; 93(4):444-449.
Salachas A, Papadopoulos C, Sakadamis G et al. Effects of a low-dose fish oil concentrate on angina, exercise tolerance time, serum triglycerides, and platelet function. *Angiology*. 1994; 45(12):1023-1031.

Excluded Studies

Study	Reasons for exclusion
Anon. Nutritional therapy of chronic stable angina. *Nurses' Drug Alert*. 2002; 26(3):23-24.	Abstract
Burr ML, Dunstan FD, George CH. Is fish oil good or bad for heart disease? Two trials with apparently conflicting results. *J Membr Biol*. 2005; 206(2):155-163.	Results of the trial reported in 15912
Frattaroli J, Weidner G, Merritt WT et al. Angina pectoris and atherosclerotic risk factors in the multisite cardiac lifestyle intervention program. *Am J Cardiol*. 2008; 101(7):911-918.	76% patients with no angina
Kristensen SD, Schmidt EB, Andersen HR et al. Fish oil in angina pectoris. *Atherosclerosis*. 1987; 64(1):13-19.	Outcomes not relevant
Makinson DH, Oleesky S, Stone RV. Vitamin E in angina pectoris. *Lancet*. 1948; 251(6490):102.	Abstract
Ness AR, shfield-Watt PAL, Whiting JM et al. The long-term effect of dietary advice on the diet of men with angina: the diet and angina randomized trial. *Journal of Human Nutrition & Dietetics*. 2004; 17(2):117-119.	Outcomes not relevant (fruits and vegetable intake)
Singh RB, Dubnov G, Niaz MA et al. Effect of an Indo-Mediterranean diet on	10% patients with angina

progression of coronary artery disease in high risk patients (Indo-Mediterranean Diet Heart Study): a randomised single-blind trial. *Lancet*. 2002; 360(9344):1455-1461.	
Yzebe D, Lievre M. Fish oils in the care of coronary heart disease patients: a meta-analysis of randomized controlled trials. *Fundamental & Clinical Pharmacology*. 2004; 18(5):581-592.	Meta analysis- Included no trials with angina patients
Zhao YT, Chen Q, Sun YX et al. Prevention of sudden cardiac death with omega-3 fatty acids in patients with coronary heart disease: a meta-analysis of randomized controlled trials. *Ann Med*. 2009; 41(4):301-310.	Meta analysis – Relevant references included in the review
Wannamethee SG, Shaper AG, Walker M. Physical activity and mortality in older men with diagnosed coronary heart disease. *Circulation*. 2000; 102(12):1358-1363.	Only 12.6% patients with MI or angina .
Liem A, Reynierse-Buitenwerf GH, Zwinderman AH et al. Secondary prevention with folic acid: effects on clinical outcomes. *J Am Coll Cardiol*. 2003; 41(12):2105-2113.	No angina patients
Anderson TW, Reid DB. A double-blind trial of vitamin E in angina pectoris. *Am J Clin Nutr*. 1974; 27(10):1174-1178.	Same study as ref IF 15907. Study included in the review.

Pain interventions

Included Studies

Study	Study design
McGillion MH, Watt WJ, Stevens B et al. Randomized controlled trial of a psychoeducation program for the self-management of chronic cardiac pain. *Journal of Pain*	RCT

& Symptom Management. 2008; 36(2):126-140.	
Payne TJ, Johnson CA, Penzien DB et al. Chest pain self-management training for patients with coronary artery disease. *J Psychosom Res*. 1994; 38(5):409-418.	RCT
Richter A, Herlitz J, Hjalmarson A. Effect of acupuncture in patients with angina pectoris. *Eur Heart J*. 1991; 12(2):175-178.	RCT
Ballegaard S, Meyer CN, Trojaborg W. Acupuncture in angina pectoris: does acupuncture have a specific effect? *J Intern Med*. 1991; 229(4):357-362.	RCT
Arora RR, Chou TM, Jain D et al. Effects of enhanced external counterpulsation on Health-Related Quality of Life continue 12 months after treatment: a substudy of the Multicenter Study of Enhanced External Counterpulsation. *J Investig Med*. 2002; 50(1):25-32.	RCT
Arora RR, Chou TM, Jain D et al. The multicenter study of enhanced external counterpulsation (MUST-EECP): effect of EECP on exercise-induced myocardial ischemia and anginal episodes. *J Am Coll Cardiol*. 1999; 33(7):1833-1840.	RCT
Ballegaard S, Pedersen F, Pietersen A et al. Effects of acupuncture in moderate, stable angina pectoris: a controlled study. *J Intern Med*. 1990; 227(1):25-30.	RCT
Mannheimer C, Carlsson CA, Emanuelsson H et al. The effects of transcutaneous electrical nerve stimulation in patients with severe angina pectoris. *Circulation*. 1985; 71(2):308-316.	RCT
Loh PH, Cleland JG, Louis AA et al. Enhanced external counterpulsation in the treatment of chronic refractory angina: a long-term follow-up outcome from the International Enhanced External Counterpulsation Patient Registry. *Clin Cardiol*. 2008; 31(4):159-164.	Before-After study (Registry)

Excluded studies

Study	Reasons for exclusion
Dyer MT, Goldsmith KA, Khan SN et al. Clinical and cost-effectiveness analysis of an open label, single-centre, randomised trial of spinal cord stimulation (SCS) versus percutaneous myocardial laser revascularisation (PMR) in patients with refractory angina pectoris: the SPiRiT trial.	Spinal cord stimulation- There is a NICE TA on this intervention , hence will not reviewed

Trials. 2008; 9(40)	
Mannheimer C, Carlsson CA, Vedin A et al. Transcutaneous electrical nerve stimulation (TENS) in angina pectoris. *Pain*. 1986; 26(3):291-300.	Results reported in 9411
De Jongste MJ, Hautvast RW, Hillege HL et al. Efficacy of spinal cord stimulation as adjuvant therapy for intractable angina pectoris: a prospective, randomized clinical study. Working Group on Neurocardiology. *J Am Coll Cardiol*. 1994; 23(7):1592-1597.	Spinal cord stimulation- There is a NICE TA on this intervention , hence will not reviewed
Hautvast RW, DeJongste MJ, Staal MJ et al. Spinal cord stimulation in chronic intractable angina pectoris: a randomized, controlled efficacy study. *Am Heart J*. 1998; 136(6):1114-1120.	Spinal cord stimulation- There is a NICE TA on this intervention , hence will not reviewed
Hammond C, Murray S, Leach AA et al. Transcutaneous electrical nerve stimulation for the treatment of patients with chronic refractory angina. *British Journal of Cardiology*. 2000; 7(5):293-295.	Article
Jessurun GA, Hautvast RW, Tio RA et al. Electrical neuromodulation improves myocardial perfusion and ameliorates refractory angina pectoris in patients with syndrome X: fad or future? *European Journal of Pain: Ejp*. 2003; 7(6):507-512.	Spinal cord stimulation- There is a NICE TA on this intervention , hence will not reviewed
Tartaglia J, Stenerson J, Jr., Charney R et al. Exercise capability and myocardial perfusion in chronic angina patients treated with enhanced external counterpulsation. *Clin Cardiol*. 2003; 26(6):287-290.	Non RCT (N=25)
Galinanes M, Loubani M, Sensky PR et al. Efficacy of transmyocardial laser revascularization and thoracic sympathectomy for the treatment of refractory angina. *Ann Thorac Surg*. 2004; 78(1):122-128.	Thoracic sympathectomy vs. Transmyocardial laser revascularisation (Transmyocardial laser revascularisation has been evaluated in the NICE TA and will not be reviewed)
Bueno EA, Mamtani R, Frishman WH. Alternative approaches to the medical management of angina pectoris: acupuncture, electrical nerve stimulation,	Article

and spinal cord stimulation. [Review] [31 refs]. *Heart Disease*. 2001; 3(4):236-241.	
Anon. Electrical stimulation of the carotid-sinus nerves for angina pectoris. *Lancet*. 1969; 2(7616):362-364.	Article
Andersen C, Hole P, Oxhoj H. Spinal cord stimulation as a pain treatment for angina pectoris. *Pain Clinic*. 1995; 8(4):333-339.	Spinal cord stimulation- There is a NICE TA on this intervention , hence will not reviewed
Hew E, Haq A, Strauss H. A randomized controlled trial of nalbuphine vs morphine in the treatment of ischemic chest pain. *Current Therapeutic Research - Clinical and Experimental*. 1987; 41(3):394-402.	Patients with suspected MI or unstable angina
Pettersson T, Bondesson SM, Cojocaru D et al. One year follow-up of patients with refractory angina pectoris treated with enhanced external counterpulsation. *BMC Cardiovascular Disorders*. 2006; 6:28.	Non RCT (N=55)
De Jongste MJ, Staal MJ. Preliminary results of a randomized study on the clinical efficacy of spinal cord stimulation for refractory severe angina pectoris. *Acta Neurochir Suppl (Wien)*. 1993; 58:161-164.	Spinal cord stimulation- There is a NICE TA on this intervention , hence will not reviewed
Jessurun GA, DeJongste MJ, Hautvast RW et al. Clinical follow-up after cessation of chronic electrical neuromodulation in patients with severe coronary artery disease: a prospective randomized controlled study on putative involvement of sympathetic activity. *Pacing and clinical electrophysiology : PACE*. 1999; 22(10):1432-1439.	Non RCT (N=8)
Lanza GA, Sestito A, Sgueglia GA et al. Effect of spinal cord stimulation on spontaneous and stress-induced angina and 'ischemia-like' ST-segment depression in patients with cardiac syndrome X. *Eur Heart J*. 2005; 26(10):983-989.	Spinal cord stimulation- There is a NICE TA on this intervention , hence will not reviewed
Braverman DL. Enhanced external counterpulsation: an innovative physical therapy for refractory angina. [Review] [40 refs]. *Pm & R*. 2009; 1(3):268-276.	Review

Kumar A, Aronow WS, Vadnerkar A et al. Effect of enhanced external counterpulsation on clinical symptoms, quality of life, 6-minute walking distance, and echocardiographic measurements of left ventricular systolic and diastolic function after 35 days of treatment and at 1-year follow up in 47 patients with chronic refractory angina pectoris. *Am J Ther*. 2009; 16(2):116-118.	Non RCT (n=47)
McKenna C, McDaid C, Suekarran S et al. Enhanced external counterpulsation for the treatment of stable angina and heart failure: A systematic review and economic analysis. *Health Technol Assess*. 2009; 13(24):ix-112.	HTA- study included in HTA included in the evidence review.
Bondesson S, Pettersson T, Erdling A et al. Comparison of patients undergoing enhanced external counterpulsation and spinal cord stimulation for refractory angina pectoris. C*oron Artery Dis*. 2008; 19(8):627-634.	EECP vs. spinal cord stimulation
Eddicks S, Maier-Hauff K, Schenk M et al. Thoracic spinal cord stimulation improves functional status and relieves symptoms in patients with refractory angina pectoris: the first placebo-controlled randomised study. *Heart (British Cardiac Society)*. 2007; 93(5):585-590.	Spinal cord stimulation- There is a NICE TA on this intervention , hence will not reviewed
McNab D, Khan SN, Sharples LD et al. An open label, single-centre, randomized trial of spinal cord stimulation vs. percutaneous myocardial laser revascularization in patients with refractory angina pectoris: the SPiRiT trial. *Eur Heart J*. 2006; 27(9):1048-1053.	Spinal cord stimulation- There is a NICE TA on this intervention , hence will not reviewed
Epstein SE, Beiser GD, Goldstein RE et al. Treatment of angina pectoris by electrical stimulation of the carotid-sinus nerves. *N Engl J Med*. 1969; 280(18):971-978.	Non RCT (N=17)
APTHORP GH, Chamberlain DA, HAYWARD GW. The effects of sympathectomy on the electrocardiogram and effort tolerance in angina pectoris. *Br Heart J*. 1964; 26(2):218-226.	Non RCT (N=8)

Khogali SS, Miller M, Rajesh PB et al. Video-assisted thoracoscopic sympathectomy for severe intractable angina. *Eur J Cardiothorac Surg*. 1999; 16(Suppl 1):S95I-S98.	Non RCT (N=10)
Ballegaard S, Jensen G, Pedersen F et al. Acupuncture in severe, stable angina pectoris: a randomized trial. *Acta Med Scand*. 1986; 220(4):307-313.	The study had 2 trials- RCT (results not reported) and the same population treated once again and treated as one group (not randomised). N=33
Lawson WE, Barsness G, Michaels AD et al. Effectiveness of repeat enhanced external counterpulsation for refractory angina in patients failing to complete an initial course of therapy. *Cardiology*. 2007; 108(3):170-175.	Not relevant to the question- Effectiveness of Repeat EECP
Michaels AD, Linnemeier G, Soran O et al. Two-year outcomes after enhanced external counterpulsation for stable angina pectoris (from the International EECP Patient Registry [IEPR]). *Am J Cardiol*. 2004; 93(4):461-464.	Paper reports 2 years outcomes-3 year outcomes of IEPR reported in the evidence review
Lawson WE, Hui JC, Kennard ED et al. Two-year outcomes in patients with mild refractory angina treated with enhanced external counterpulsation. *Clin Cardiol*. 2006; 29(2):69-73.	Paper reports 2 years outcomes-3 year outcomes of IEPR reported in the evidence review
Wiener L, Cox JW. Influence of stellate ganglion block on angina pectoris and the post-exercise electrocardiogram. *Am J Med Sci*. 1966; 252(3):289-295.	Data poorly reported and cannot used. N=10. Poorly conducted study.

Cardiac Syndrome X References

Included Studies

Study
Bugiardini, R., Borghi, A., Biagetti, L., & Puddu, P. (1989), "Comparison of verapamil versus propranolol therapy in syndrome X", *American Journal of Cardiology*, vol. 63, no. 5, pp. 286-290.
Chen, J. W., Lee, W. L., Hsu, N. W., Lin, S. J., Ting, C. T., Wang, S. P., & Chang, M. S. (1997), "Effects of short-term treatment of nicorandil on exercise-induced

myocardial ischemia and abnormal cardiac autonomic activity in microvascular angina", *American Journal of Cardiology*, vol. 80, no. 1, pp. 32-38.
Cannon R, Watson RM, Rosing DR, Epstein SE. Efficacy of calcium channel blocker therapy for angina pectoris resulting from small-vessel coronary artery disease and abnormal vasodilator reserve. American Journal of Cardiology 1985; 56:242-6
Lanza, G. A., Colonna, G., Pasceri, V., & Maseri, A. (1999), "Atenolol versus amlodipine versus isosorbide-5-mononitrate on anginal symptoms in syndrome X", *American Journal of Cardiology*, vol. 84, no. 7, pp. 854-856.
Romeo, F., Gaspardone, A., Ciavolella, M., Gioffre, P., & Reale, A. (1988), "Verapamil versus acebutolol for syndrome X", *American Journal of Cardiology*, vol. 62, no. 4, pp. 312-313.
Radice, M., Giudici, V., Pusineri, E., Breghi, L., Nicoli, T., Peci, P., Giani, P., & De, A. L. (1996), "Different effects of acute administration of aminophylline and nitroglycerin on exercise capacity in patients with syndrome X", *American Journal of Cardiology*, vol. 78, no. 1, pp. 88-92.
Pizzi C, Manfrini O, Fontana F et al. Angiotensin-converting enzyme inhibitors and 3-hydroxy-3-methylglutaryl coenzyme A reductase in cardiac Syndrome X: role of superoxide dismutase activity. *Circulation*. 2004; 109(1):53-58.

Excluded studies

Study	Reasons for exclusion
Fragasso, G., Chierchia, S. L., Pizzetti, G., Rossetti, E., Carlino, M., Gerosa, S., Carandente, O., Fedele, A., & Cattaneo, N. (1997), "Impaired left ventricular filling dynamics in patients with angina and angiographically normal coronary arteries: Effect of beta adrenergic blockade", *Heart*, vol. 77, no. 1, pp. 32-39	Not RCT
Hurst, T., Olson, T. H., Olson, L. E., & Appleton, C. P. (2006), "Cardiac syndrome X and endothelial dysfunction: new concepts in prognosis and	Narrative review

treatment.[see comment]. [Review] [65 refs]", *American Journal of Medicine*, vol. 119, no. 7, pp. 560-566.	
Lanza, G. A., Manzoli, A., Bia, E., Crea, F., & Maseri, A. (1994), "Acute effects of nitrates on exercise testing in patients with syndrome X: Clinical and pathophysiological implications", *Circulation*, vol. 90, no. 6, pp. 2695-2700.	Not RCT
Rogacka, D., Guzik, P., Wykretowicz, A., Rzezniczak, J., Dziarmaga, M., & Wysocki, H. (2000), "Effects of trimetazidine on clinical symptoms and tolerance of exercise of patients with syndrome X: a preliminary study", *Coronary Artery Disease*, vol. 11, no. 2, pp. 171-177.	Not RCT
Simoons, M. L., Vos, J., de Feyter, P. J., Bots, M. L., Remme, W. J., Grobbee, D. E., Kluft, C., de Maat, M. P., Fox, K. M., & Deckers, J. W. (1998), "EUROPA substudies, confirmation of pathophysiological concepts. European trial on reduction of cardiac events with perindopril in stable coronary artery disease. [Review] [44 refs]", *European Heart Journal*, vol. 19 Suppl J:J56-60, 1998 Sep., p. J56-J60.	Wrong topic
Sutsch, G., Oechslin, E., Mayer, I., & Hess, O. M. (1995), "Effect of diltiazem on coronary flow reserve in patients with microvascular angina", *International Journal of Cardiology*, vol. 52, no. 2, pp. 135-143.	Not RCT
Fabian E, Varga A, Picano E et al. Effect of simvastatin on endothelial function in cardiac syndrome X patients. *Am J Cardiol*. 2004; 94(5):652-655.	Already used in statins question
Kayikcioglu M, Payzin S, Yavuzgil O et al. Benefits of statin treatment in cardiac syndrome-X1.[see comment]. *Eur Heart J*. 2003; 24(22):1999-2005.	Already used in statins question