

Clinical trials of sp

TrialResults-center www.trialresultscenter.org

1 acute myocardial infarction

Trial	Treatments	Patients	Trials design and methods
aspirin vs control			
Huddinge , 1988 n=10/10 follow-up: 30d (12m)	aspirin 500mg/d starting 12 h after admission and then intermittently every third day for one month versus no aspirin	patients with acute myocardial infarction	Parallel groups open
Frankfurt , 1976 n=25/28 follow-up: 14d	-	-	Parallel groups
SpideRX vs conventional PCI			
PREMIAR , 2007 n=70/70 follow-up: 1, 6 months	SpideRX versus PCI without embolic protection	with acute ST-segment elevation myocardial infarction at high risk of embolic events (including only baseline Thrombolysis In Myocardial Infarction grade 0 to 2 flow)	open
aspirin vs placebo			
ISIS-pilot , 1987 n=313/306 follow-up: 1m	aspirin (325 mg on alternate days for 28 days) versus placebo	suspected acute myocardial infarction	Parallel groups double blind
ISIS-2 , 1988 n=8587/8600 follow-up: 35d	160 mg/day enteric-coated aspirin for one month versus placebo	suspected acute myocardial up to 24h	Parallel groups double blind
Dutch-aspirin , 1990 n=50/50 follow-up: 3m	aspirin (100 mg/day) for 3 months versus placebo	patients with first anterior wall AMI	Parallel groups double blind
APRICOT , 1993 n=107/95 follow-up: 3m	325 mg aspirin daily with discontinuation of heparin versus placebo	Patients treated with intravenous thrombolytic therapy followed by intravenous heparin and with patent infarct-related artery demonstrated at angiography within 48 hours	Parallel groups double blind The Netherlands

continued...

Trial	Treatments	Patients	Trials design and methods
cardiosphere-derived stem cells vs control			
CADUCEUS <i>ongoing</i> [NCT00893360] n=NA follow-up: 12 months	Autologous cardiosphere-derived stem cell intra-coronary infusion versus control	patients with ischemic left ventricular dysfunction and a recent myocardial infarction	Parallel groups open
Prehospital thrombolysis vs at hospital thrombolysis			
EMIP , 1993 n=2750/2719 follow-up: ND	-	-	ND
GREAT , 1994 n=163/148 follow-up: ND	-	-	ND
MITI , 1993 [NCT00000468] n=175/175 follow-up: ND	-	-	ND
Roth , 1990 n=72/44	-	-	
Barbash , 1990 n=NA	-	-	
Castaigne , 1987 n=NA	-	-	
Mcneill , 1989 n=NA	-	-	
Schofer , 1990 n=40/38	-	-	
Castaigne , 1989 n=57/43	-	-	
TEAHAT , 1990 n=NA follow-up: ND	-	-	ND

More details and results :

- myocardial revascularization for acute myocardial infarction in all type of patients at <http://www.trialresultscenter.org/go-Q129>
- cell-based therapies for acute myocardial infarction in PCI at <http://www.trialresultscenter.org/go-Q313>
- thrombectomy for acute myocardial infarction in all type of patients at <http://www.trialresultscenter.org/go-Q350>
- antiplatelets drug for acute myocardial infarction in all type of patients at <http://www.trialresultscenter.org/go-Q390>

References

Huddinge, 1988:

Rasmanis G, Vesterqvist O, Gren K, Edhag O, Henriksson P Effects of intermittent treatment with aspirin on thromboxane and prostacyclin formation in patients with acute myocardial infarction. *Lancet* 1988;2:245-7 [2899236]

Frankfurt, 1976:

Asasantin DVT nach Myokardinfarktp, imag Boehringer Ingelheim, 1976. (Boehringer Ingelheim internal report.)

PREMIAR, 2007:

Cura FA, Escudero AG, Berrocal D, Mendiz O, Trivi MS, Fernandez J, Palacios A, Albertal M, Piraino R, Riccitelli MA, Gruberg L, Ballarino M, Milei J, Baeza R, Thierer J, Grinfeld L, Krucoff M, O'Neill W, Belardi J Protection of Distal Embolization in High-Risk Patients with Acute ST-Segment Elevation Myocardial Infarction (PREMIAR). *Am J Cardiol* 2007;99:357-63 [17261398]

Cura FA, Escudero AG, Berrocal D, Mendiz O, Trivi MS, Fernandez J, Palacios A, Albertal M, Piraino R, Riccitelli MA, Gruberg L, Ballarino M, Milei J, Baeza R, Thierer J, Grinfeld L, Krucoff M, O'Neill W, Belardi J *Am J Cardiol* 2007;99:357-63 [17261398] [10.1016/j.amjcard.2006.08.038](https://doi.org/10.1016/j.amjcard.2006.08.038)

ISIS-pilot, 1987:

Randomized factorial trial of high-dose intravenous streptokinase, of oral aspirin and of intravenous heparin in acute myocardial infarction. ISIS (International Studies of Infarct Survival) pilot study. *Eur Heart J* 1987;8:634-42 [2887430]

ISIS-2, 1988:

Randomised trial of intravenous streptokinase, oral aspirin, both, or neither among 17,187 cases of suspected acute myocardial infarction: ISIS-2. ISIS-2 (Second International Study of Infarct Survival) Collaborative Group. *Lancet* 1988;2:349-60 [2899772]

Dutch-aspirin, 1990:

Verheugt FW, van der Laarse A, Funke-Kpper AJ, Sterkman LG, Galema TW, Roos JP Effects of early intervention with low-dose aspirin (100 mg) on infarct size, reinfarction and mortality in anterior wall acute myocardial infarction. *Am J Cardiol* 1990;66:267-70 [2195861]

APRICOT, 1993:

Meijer A, Verheugt FW, Werter CJ, Lie KI, van der Pol JM, van Eenige MJ Aspirin versus coumadin in the prevention of reocclusion and recurrent ischemia after successful thrombolysis: a prospective placebo-controlled angiographic study. Results of the APRICOT Study. *Circulation* 1993;87:1524-30 [8491007]

CADUCEUS, :

ongoing trial NCT00893360

EMIP, 1993:

, Prehospital thrombolytic therapy in patients with suspected acute myocardial infarction. The European Myocardial Infarction Project Group. *N Engl J Med* 1993; 329:383-9 [8326971]

GREAT, 1994:

Rawles J, Halving of mortality at 1 year by domiciliary thrombolysis in the Grampian Region Early Anistreplase Trial (GREAT). *J Am Coll Cardiol* 1994; 23:1-5 [8277066]

Feasibility, safety, and efficacy of domiciliary thrombolysis by general practitioners: Grampian region early anistreplase trial. GREAT Group. *BMJ* 1992;305:548-53 [1393033]

MITI, 1993:

Weaver WD, Cerqueira M, Hallstrom AP, Litwin PE, Martin JS, Kudenchuk PJ, Eisenberg M Prehospital-initiated vs hospital-initiated thrombolytic therapy. The Myocardial Infarction Triage and Intervention Trial. JAMA 1993;270:1211-6 [8355383]

Roth, 1990:

Roth A, Barbash GI, Hod H, Miller HI, Rath S, Modan M, Har-Zahav Y, Keren G, Bassan S, Kaplinsky E Should thrombolytic therapy be administered in the mobile intensive care unit in patients with evolving myocardial infarction? A pilot study. J Am Coll Cardiol 1990;15:932-6 [2107239]

Barbash, 1990:

Barbash GI, Roth A, Hod H, Miller HI, Modan M, Rath S, Zahav YH, Shachar A, Basan S, Battler A Improved survival but not left ventricular function with early and prehospital treatment with tissue plasminogen activator in acute myocardial infarction. Am J Cardiol 1990 Aug 1;66:261-6 [2114782]

Castaigne, 1987:

Castaigne AD, Duval AM, Dubois-Rande JL, Herve C, Jan F, Louvard Y Prehospital administration of anisoylated plasminogen streptokinase activator complex in acute myocardial infarction. Drugs 1987;33 Suppl 3:231-4 [3315600]

Mcneill, 1989:

McNeill AJ, Cunningham SR, Flannery DJ, Dalzell GW, Wilson CM, Campbell NP, Khan MM, Patterson GC, Webb SW, Adgey AA A double blind placebo controlled study of early and late administration of recombinant tissue plasminogen activator in acute myocardial infarction. Br Heart J 1989 Apr;61:316-21 [2496740]

Schofer, 1990:

Schofer J, Bttner J, Geng G, Gutschmidt K, Herden HN, Mathey DG, Moecke HP, Polster P, Raftopoulos A, Sheehan FH Prehospital thrombolysis in acute myocardial infarction. Am J Cardiol 1990;66:1429-33 [2251987]

Castaigne , 1989:

Castaigne AD, Herv C, Duval-Moulin AM, Gaillard M, Dubois-Rande JL, Boesch C, Wolf M, Lellouche D, Jan F, Vernant P Prehospital use of APSAC: results of a placebo-controlled study. Am J Cardiol 1989;64:30A-33A; discussion 41A-42A [2662741]

TEAHAT, 1990:

Very early thrombolytic therapy in suspected acute myocardial infarction. The Thrombolysis Early in Acute Heart Attack Trial Study Group. Am J Cardiol 1990;65:401-7 [2106252]

2 post stroke

Trial	Treatments	Patients	Trials design and methods
aspirin vs placebo			
Canadian study (CCSG) , 1978 n=144/139 follow-up: ND	aspirin 325 mg/d versus placebo	-	Factorial plan Double blind
Swedish study , 1987 n=253/252 follow-up: 2 y	aspirin 1,500 mg/d versus placebo	-	

continued...

Trial	Treatments	Patients	Trials design and methods
UK-TIA low dose , 1988 n=806/814 follow-up: 4 y	aspirin 300 mg/d versus placebo	-	
UK-TIA high dose , 1988 n=815/814 follow-up: 2y	aspirin 1,200 mg/d versus placebo	-	
SALT , 1991 n=676/684 follow-up: 32 mo	aspirin 75 mg/d versus placebo	-	
Reuther , 1976 n=30/30 follow-up: 2 y	aspirin 1,500 mg/d versus placebo	-	
AITA , 1975 n=162/157 follow-up: 1 y	aspirin 1,300 mg/d versus placebo	-	
DCS , 1980 n=101/102 follow-up: 25 mo	aspirin 1,000 mg/d versus placebo	-	
AICLA , 1981 n=198/204 follow-up: 3 y	aspirin 990 mg/d versus placebo	-	
Lindblad , 1991 n=117/115 follow-up: 6 mo	aspirin 75 mg/d, during 6 months versus placebo	-	
Danish low-dose , 1986 n=150/151 follow-up: 23 mo	aspirin 50-100 mg/d (mean 54 mg/d) versus placebo	-	
ESPS 2 , 1996 n=1649/1649 follow-up: 2 y	aspirin 50 mg/d versus placebo	-	

CT

More details and results :

- antiplatelets drug for post stroke in all type of patients at <http://www.trialresultscenter.org/go-Q411>

References

Canadian study (CCSG), 1978:

A randomized trial of aspirin and sulfipyrazone in threatened stroke. The Canadian Cooperative Study Group. N Engl J Med 1978;299:53-9 [351394]

Swedish study , 1987:

High-dose acetylsalicylic acid after cerebral infarction. A Swedish Cooperative Study. Stroke 1987;18:325-34 [2882626]

UK-TIA low dose , 1988:

Farrell B, Godwin J, Richards S, Warlow C The United Kingdom transient ischaemic attack (UK-TIA) aspirin trial: final results. J Neurol Neurosurg Psychiatry 1991;54:1044-54 [1783914]

UK-TIA high dose , 1988:

Farrell B, Godwin J, Richards S, Warlow C The United Kingdom transient ischaemic attack (UK-TIA) aspirin trial: final results. J Neurol Neurosurg Psychiatry 1991;54:1044-54 [1783914]

SALT , 1991:

Swedish Aspirin Low-Dose Trial (SALT) of 75 mg aspirin as secondary prophylaxis after cerebrovascular ischaemic events. The SALT Collaborative Group. Lancet 1991;338:1345-9 [1682734]

Reuther , 1976:

Stuttgart Schattauer 1978;97-106 [0]

AITA, 1975:

Fields WS, Lemak NA, Frankowski RF, Hardy RJ Controlled trial of aspirin in cerebral ischemia. Part II: surgical group. Stroke 1978;9:309-19 [354098]

DCS, 1980:

Sorensen PS, Pedersen H, Marquardsen J, Petersson H, Heltberg A, Simonsen N, Munck O, Andersen LA Acetylsalicylic acid in the prevention of stroke in patients with reversible cerebral ischemic attacks. A Danish cooperative study. Stroke 1983;14:15-22 [6337425]

AICLA, 1981:

Bousser MG, Eschwege E, Haguenau M, Lefaucconnier JM, Thibult N, Touboul D, Touboul PJ "AICLA" controlled trial of aspirin and dipyridamole in the secondary prevention of athero-thrombotic cerebral ischemia. Stroke 1983;14:5-14 [6401878]

Lindblad , 1991:

Lindblad B, Persson NH, Takolander R, Bergqvist D Does low-dose acetylsalicylic acid prevent stroke after carotid surgery? A double-blind, placebo-controlled randomized trial. Stroke 1993;24:1125-8 [8342184]

Danish low-dose, 1986:

Barnett HJ, Eliasziw M, Meldrum HE Drugs and surgery in the prevention of ischemic stroke. N Engl J Med 1995;332:238-48 [7808491]

ESPS 2 , 1996:

Diener HC, Cunha L, Forbes C, Sivenius J, Smets P, Lowenthal A European Stroke Prevention Study. 2. Dipyridamole and acetylsalicylic acid in the secondary prevention of stroke. J Neurol Sci 1996;143:1-13 [8981292]

3 post myocardial infarction

Trial	Treatments	Patients	Trials design and methods
aspirin vs placebo			

continued...

Trial	Treatments	Patients	Trials design and methods
CDPA , 1976 n=758/771 follow-up: 1.83 y	Aspirin (324 mg) 3x/d versus Placebo	MI survivors	Parallel groups Double blind USA
Cardiff I , 1974 n=615/624 follow-up: 2 years	Aspirin (300 mg) 1x/d versus Placebo	MI survivors	Parallel groups Double blind UK
Cardiff II , 1979 n=832/850 follow-up: 1 y	Aspirin (300 mg) 3x/d for one year versus Placebo	patients with myocardial infarction	Parallel groups Double blind South Wales
Vogel , 1979 n=672/668 follow-up: 1.75 y (mean)	Aspirin (1.5 g daily) on an average period of 22 months versus Placebo	-	Parallel groups Double blind Germany
AMIS , 1980 [NCT00000491] n=2267/2257 follow-up: >3 y	Aspirin (500 mg) 2x/d for at least 3 years versus Placebo	men and women who had had a documented myocardial infarction	Parallel groups Double blind USA
GAMIS , 1980 n=317/309 follow-up: 2 y	Aspirin (500 mg) 3x/d for 2 years versus Placebo	patients who had survived a myocardial infarction for 30-42 days	Parallel groups Double blind Germany, Austria,
PARIS , 1980 n=810/406 follow-up: 41 mo	Aspirin (324 mg) 3x/d versus Placebo	patients who had recovered from myocardial infarction	Parallel groups Double blind USA, UK
JAMIS , 1999 n=250/230 follow-up: 1.3 y (mean)	Aspirin (81 mg) 1x/d versus No antiplatelets	patients with AMI within 1 month from the onset of symptoms	Parallel groups Open Japan
dipyridamol + aspirin vs placebo			
PARIS , 1980 n=810/406 follow-up: 41 months (mean)	Aspirin (324 mg) + dipyridamole (75 mg) 3x/d versus Placebo	patients who had recovered from myocardial infarction	Parallel groups Double blind USA and UK

continued...

Trial	Treatments	Patients	Trials design and methods
PARIS-II , 1986 n=1563/1565 follow-up: 23.4 months	Aspirin (330 mg) + dipyridamole (75 mg) 3x/d versus Placebo	patients who had recovered from myocardial infarction, suffered from 4 weeks to 4 months previously	Parallel groups Double blind USA and UK
dipyridamol + aspirin vs aspirin			
PARIS , 1980 n=810/810 follow-up: 41 months	Aspirin (324 mg) + dipyridamole (75 mg) 3x/d versus Aspirin (324 mg) 3x/d	patients who had recovered from myocardial infarction	Parallel groups Double blind USA and GB

More details and results :

- antiplatelets drug for post myocardial infarction in all type of patient at <http://www.trialresultscenter.org/go-Q277>
- secondary prevention for post myocardial infarction in all type of patients at <http://www.trialresultscenter.org/go-Q449>

References

CDPA, 1976:

, Aspirin in coronary heart disease. The Coronary Drug Project Research Group. J Chronic Dis 1976; 29:625-42 [789390]

Cardiff I, 1974:

Elwood P, Trial of acetylsalicylic acid in the secondary prevention of mortality from myocardial infarction. Br Med J (Clin Res Ed) 1981; 282:481 [6780093]

Cardiff II, 1979:

Elwood PC, Sweetnam PM, Aspirin and secondary mortality after myocardial infarction. Lancet 1979; 2:1313-5 [92668]

Vogel, 1979:

Folia Haematol 1979; 106:797-803 [0]

AMIS, 1980:

, The aspirin myocardial infarction study: final results. The Aspirin Myocardial Infarction Study research group. Circulation 1980; 62:V79-84 [7438383]

, A randomized, controlled trial of aspirin in persons recovered from myocardial infarction. JAMA 1980; 243:661-9 [6985998]

GAMIS, 1980:

Breddin K, Loew D, Lechner K, Oberla K, Walter E, The German-Austrian aspirin trial: a comparison of acetylsalicylic acid, placebo and phenprocoumon in secondary prevention of myocardial infarction. On behalf of the German-Austrian Study Group. Circulation 1980; 62:V63-72 [6777073]

PARIS, 1980:

, Persantine and aspirin in coronary heart disease. The Persantine-Aspirin Reinfarction Study Research Group. Circulation 1980; 62:449-61 [7398002]

JAMIS, 1999:

Yasue H, Ogawa H, Tanaka H, Miyazaki S, Hattori R, Saito M, Ishikawa K, Masuda Y, Yamaguchi T, Motomiya T, Tamura Y, Effects of aspirin and trapidil on cardiovascular events after acute myocardial infarction. Japanese Antiplatelets Myocardial Infarction Study (JAMIS) Investigators. Am J Cardiol 1999; 83:1308-13 [10235086]

PARIS, 1980:

, Persantine and aspirin in coronary heart disease. The Persantine-Aspirin Reinfarction Study Research Group. Circulation 1980; 62:449-61 [7398002]

, Persantine and aspirin in coronary heart disease. The Persantine-Aspirin Reinfarction Study Research Group. Circulation 1980; 62:449-61 [7398002]

PARIS-II, 1986:

Klimt CR, Knatterud GL, Stamler J, Meier P, Persantine-Aspirin Reinfarction Study. Part II. Secondary coronary prevention with persantine and aspirin. J Am Coll Cardiol 1986; 7:251-69 [2868029]

PARIS, 1980:

, Persantine and aspirin in coronary heart disease. The Persantine-Aspirin Reinfarction Study Research Group. Circulation 1980; 62:449-61 [7398002]

4 cardiovascular prevention

Trial	Treatments	Patients	Trials design and methods
rivaroxaban + aspirin vs aspirin			
COMPASS (rivaroxaban + aspirin) , 2017 [NCT01776424] n=9152/9126 follow-up: 23 months	rivaroxaban (2.5 mg twice daily) plus aspirin (100 mg once daily) versus aspirin 100 mg once daily	Patients With Coronary or Peripheral Artery Disease	Parallel groups double-blind
aspirin vs no treatment			
British Doctors Trial , 1988 n=3429/1710 follow-up: 5.5 years	aspirin 500 mg/d versus no aspirin	apparently healthy male doctors	Parallel groups open UK
PPP (diabetics sub group) , 2003 n=519/512 follow-up: 3.6 y	aspirin 100mg daily versus control	men and women with diabetes and without a previous cardiovascular event aged >50 with >=1 risk factors for cardiovascular disease - sub group of diabetic patients	Factorial plan open Italy
Primary Prevention Project , 2001 n=2226/2269 follow-up: 3.6 y	aspirin 100 mg/d versus no aspirin (open control)	men and women aged 50 years or greater, with at least one of the major recognised cardiovascular risk factors.	Factorial plan Open Italy
JPAD , 2008 [NCT00110448] n=1262/1277 follow-up: 4.37 y median	low-dose aspirin (81 or 100 mg per day) versus no aspirin	patients with type 2 diabetes without a history of atherosclerotic disease	Parallel groups open Japan
aspirin + dipyridamol vs placebo			

continued...

Trial	Treatments	Patients	Trials design and methods
Hess (2) , 1985 n=80/80 follow-up:	Aspirine Dipyridamole 330 mg / j 225 mg / j versus Placebo	patients with occlusive arterial disease in the lower extremities	Parallel groups double blind
Schoop (2) , 1983 n=100/100 follow-up:	Aspirine Dipyridamole 990 mg / j 225 mg /j versus Placebo	AOMI stade non precis	Parallel groups double blind
VA study , 1986 n=110/121 follow-up: 46 months	Aspirine + Dipyridamole 975 mg / j 225 mg /j versus Placebo	non-insulin-dependent diabetic men with either a recent amputation for gangrene or active gangrene	Parallel groups double blind
dipyridamol + aspirin vs placebo			
PARIS , 1980 n=810/406 follow-up: 41 months (mean)	Aspirin (324 mg) + dipyridamole (75 mg) 3x/d versus Placebo	patients who had recovered from myocardial infarction	Parallel groups Double blind USA and UK
PARIS-II , 1986 n=1563/1565 follow-up: 23.4 months	Aspirin (330 mg) + dipyridamole (75 mg) 3x/d versus Placebo	patients who had recovered from myocardial infarction, suffered from 4 weeks to 4 months previously	Parallel groups Double blind USA and UK
warfarin + aspirin vs placebo			
Thrombosis Prevention trial (W plus A) , 1998 [NCT00000614] n=1277/1272 follow-up: median 6.8 y	warfarin adjusted dose for INR of 1.5 + aspirin 75 mg daily versus placebo	men aged between 45 years and 69 years at high risk of IHD	NA double blind UK
aspirin vs no aspirin			
JPPP ongoing [NCT00225849] n=NA follow-up:	aspirin versus no aspirin	Japanese patients aged 60 to 85 years with hypertension, dyslipidemia, or diabetes mellitus	Parallel groups open Japan
aspirin vs placebo			
CLIPS , 2007 n=185/181 follow-up: 20.7 months mean	oral aspirin 100 mg daily versus placebo	outpatients with stage I-II PAD documented by angiography or ultrasound, with ankle/brachial index <0.85 or toe index <0.6	Factorial plan double blind Europe

continued...

Trial	Treatments	Patients	Trials design and methods
AAA , 2009 [ISRCTN66587262] n=1675/1675 follow-up: 8.2 y (mean)	aspirin 100mg daily versus placebo	men and women aged 50 to 80 years with asymptomatic atherosclerosis detected by low ankle brachial index (≤ 0.95)	Parallel groups double blind UK, Scotland
PHS (diabetics sub group) , 1989 n=275/258 follow-up: 5 y	aspirin 325 mg every other day versus placebo	healthy men (diabetic sub group of patients enrolled if PHS)	Factorial plan double blind
Munich B , 1975 n=42/40 follow-up:	Aspirine 1500 mg / jour pendant 24 mois versus Placebo	NA	Parallel groups double blind
Physicians Health Study , 1989 [NCT00000500] n=11037/11034 follow-up: 60.2 months	aspirin 325 mg every other day versus placebo	Healthy men	Parallel groups double blind
Thrombosis Prevention Trial , 1998 [NCT00000614] n=2545/2540 follow-up: median 6.8y	aspirin 75 mg/d (controlled release) versus placebo	Men at high risk of CHD	Factorial plan double blind UK
ETDRS , 1992 n=1856/1855 follow-up: 60 months	aspirin 650mg once daily versus placebo	patients with diabetes mellitus (Type I or II)	Parallel groups double blind
CDPA , 1976 n=758/771 follow-up: 1.83 y	Aspirin (324 mg) 3x/d versus Placebo	MI survivors	Parallel groups Double blind USA
Cardiff I , 1974 n=615/624 follow-up: 2 years	Aspirin (300 mg) 1x/d versus Placebo	MI survivors	Parallel groups Double blind UK
Cardiff II , 1979 n=832/850 follow-up: 1 y	Aspirin (300 mg) 3x/d for one year versus Placebo	patients with myocardial infarction	Parallel groups Double blind South Wales

continued...

Trial	Treatments	Patients	Trials design and methods
Vogel , 1979 n=672/668 follow-up: 1.75 y (mean)	Aspirin (1.5 g daily) on an average period of 22 months versus Placebo	-	Parallel groups Double blind Germany
AMIS , 1980 [NCT00000491] n=2267/2257 follow-up: >3 y	Aspirin (500 mg) 2x/d for at least 3 years versus Placebo	men and women who had had a documented myocardial infarction	Parallel groups Double blind USA
GAMIS , 1980 n=317/309 follow-up: 2 y	Aspirin (500 mg) 3x/d for 2 years versus Placebo	patients who had survived a myocardial infarction for 30-42 days	Parallel groups Double blind Germany, Austria,
PARIS , 1980 n=810/406 follow-up: 41 mo	Aspirin (324 mg) 3x/d versus Placebo	patients who had recovered from myocardial infarction	Parallel groups Double blind USA, UK
JAMIS , 1999 n=250/230 follow-up: 1.3 y (mean)	Aspirin (81 mg) 1x/d versus No antiplatelets	patients with AMI within 1 month from the onset of symptoms	Parallel groups Open Japan
Munich A , 1975 n=92/84 follow-up:	Aspirine: 1500 mg / jour versus Placebo	Donnes non disponibles	Parallel groups double blind
HOT , 1998 n=9399/9391 follow-up: mean 3.8 y (range 3.3-4.9y)	aspirin 75 mg daily versus placebo	patients aged 50-80 with hypertension and diastolic blood pressure between 100 mmHG and 115 mmHG	Factorial plan Double blind Europe, North and South America, and Asia
WHS (diabetics sub group) , 2005 n=514/513 follow-up: 10.1 y	aspirin 100mg on alternate days versus placebo	healthy women 45 years of age or older - diabetics sub groups	Parallel groups double blind US
Womens Health Study , 2005 n=19934/19942 follow-up: 10.1 y mean (range 8.2 to 10.9)	aspirin 100mg daily versus placebo	initially healthy women 45 years of age or older	Factorial plan Double blind

continued...

Trial	Treatments	Patients	Trials design and methods
SAPAT , 1992 n=1009/1026 follow-up: 50 months	aspirin 75 mg daily versus placebo	patients with stable chronic angina pectoris	Parallel groups double blind Sweden
POPADAD aspirin , 2008 [ISRCTN53295293] n=638/638 follow-up: nov 1997 - jul 2001	aspirin 100mg daily versus placebo	patients with diabetes mellitus and asymptomatic peripheral arterial disease	Factorial plan double blind Scotland
Schoop , 1983 n=100/100 follow-up: <5 y	groupe 1 : Aspirine 990 mg / j (pour mmoire : groupe 2 : Aspirine 990 mg / j + dipyridamole 225 mg/j) versus Placebo	AOMI stade non prcis	Parallel groups double blind
DAMAD , 1989 n=318/157 follow-up: 3 y	aspirin alone (330 mg 3 times daily) or in combination with dipyridamole (75 mg 3 times daily) versus placebo	patients with early diabetic retinopathy	Parallel groups double blind
Hess , 1985 n=80/80 follow-up:	groupe 1 : Aspirine 330 mg / j (pour mmoire : groupe 2 : Aspirine 330 mg / j + dipyridamole 75 mg / j) versus Placebo	AOMI stade non prcis	Parallel groups single blind
ASCEND (aspirin) ongoing [NCT00135226] n=NA follow-up:	aspirin 100mg daily versus placebo	people with diabetes without cardiovascular disease	Factorial plan double blind UK
ACCEPT-D ongoing [ISRCTN48110081] n=NA follow-up:	aspirin 100mg daily top simvastatin 20mg daily versus no aspirin on top simvastatin 20mg daily	diabetic patients without clinically manifest vascular disease	Parallel groups open
dipyridamol + aspirin vs aspirin			
PARIS , 1980 n=810/810 follow-up: 41 months	Aspirin (324 mg) + dipyridamole (75 mg) 3x/d versus Aspirin (324 mg) 3x/d	patuents who had recovered from myocardial infarction	Parallel groups Double blind USA and GB

More details and results :

- antiplatelets drug for cardiovascular prevention in diabetic patients at <http://www.trialresultscenter.org/go-Q220>

- antiplatelets drug for cardiovascular prevention in all type of patients at <http://www.trialresultscenter.org/go-Q226>
- antiplatelets drug for cardiovascular prevention in secondary prevention in patients with intermittent claudication at <http://www.trialresultscenter.org/go-Q275>
- antiplatelets drug for cardiovascular prevention in secondary prevention in patients with CAD at <http://www.trialresultscenter.org/go-Q276>
- antiplatelets drug for cardiovascular prevention in primary prevention at <http://www.trialresultscenter.org/go-Q322>
- antiplatelets drug for cardiovascular prevention in patients without established disease at <http://www.trialresultscenter.org/go-Q403>
- anticoagulant for cardiovascular prevention in secondary prevention at <http://www.trialresultscenter.org/go-Q481>
- direct oral anticoagulant (DAO) for cardiovascular prevention in secondary prevention at <http://www.trialresultscenter.org/go-Q706>
- direct factor Xa inhibitors for cardiovascular prevention in secondary prevention at <http://www.trialresultscenter.org/go-Q707>
- anticoagulant for cardiovascular prevention in all type of patients at <http://www.trialresultscenter.org/go-Q709>
- anticoagulant for cardiovascular prevention in primary prevention at <http://www.trialresultscenter.org/go-Q710>

References

COMPASS (rivaroxaban + aspirin), 2017:

Eikelboom JW, Connolly SJ, Bosch J, Dagenais GR, Hart RG, Shestakovska O, Diaz R, Alings M, Lonn EM, Anand SS, Widimsky P, Hori M, Avezum A, Piegas LS, Branch KRH, Probstfield J, Bhatt DL, Zhu J, Liang Y, Maggioni AP, Lopez-Jaramillo P, O'Donnell M, Kakka Rivaroxaban with or without Aspirin in Stable Cardiovascular Disease. *N Engl J Med* 2017;377:1319-1330 [[28844192](#)]

British Doctors Trial, 1988:

Peto R, Gray R, Collins R, Wheatley K, Hennekens C, Jamrozik K, Warlow C, Hafner B, Thompson E, Norton S Randomised trial of prophylactic daily aspirin in British male doctors. *Br Med J (Clin Res Ed)* 1988 Jan 30;296:313-6 [[3125882](#)]

PPP (diabetics sub group), 2003:

Sacco M, Pellegrini F, Roncaglioni MC, Avanzini F, Tognoni G, Nicolucci A Primary prevention of cardiovascular events with low-dose aspirin and vitamin E in type 2 diabetic patients: results of the Primary Prevention Project (PPP) trial. *Diabetes Care* 2003;26:3264-72 [[14633812](#)]

Primary Prevention Project, 2001:

de Gaetano G Low-dose aspirin and vitamin E in people at cardiovascular risk: a randomised trial in general practice. Collaborative Group of the Primary Prevention Project. *Lancet* 2001 Jan 13;357:89-95 [[11197445](#)]

JPAD, 2008:

Ogawa H, Nakayama M, Morimoto T, Uemura S, Kanauchi M, Doi N, Jinnouchi H, Sugiyama S, Saito Y Low-dose aspirin for primary prevention of atherosclerotic events in patients with type 2 diabetes: a randomized controlled trial. *JAMA* 2008;300:2134-41 [[18997198](#)]

Hess (2), 1985:

Drug-induced inhibition of platelet function delays progression of peripheral occlusive arterial disease. A prospective double-blind arteriographically controlled trial. Hess H, Mietaschk A, Deichsel G *Lancet* 1985 Feb 23;1:415-9 [2857803]

Schoop (2), 1983:

W Schoop, H Levy. prevention of peripheral arterial occlusive disease with antiaggregants. *Thromb Haemost* 1983, 30: 137.

VA study, 1986:

Veterans Administration Cooperative Study on antiplatelet agents in diabetic patients after amputation for gangrene: II. Effects of aspirin and dipyridamole on atherosclerotic vascular disease rates. Colwell JA, Bingham SF, Abaira C, Anderson JW, Comstock JP, Kwaan HC, Nuttall F *Diabetes Care* 1986 Mar-Apr;9:140-8 [3516608]

PARIS, 1980:

, Persantine and aspirin in coronary heart disease. The Persantine-Aspirin Reinfarction Study Research Group. *Circulation* 1980; 62:449-61 [7398002]

, Persantine and aspirin in coronary heart disease. The Persantine-Aspirin Reinfarction Study Research Group. *Circulation* 1980; 62:449-61 [7398002]

PARIS-II, 1986:

Klimt CR, Knatterud GL, Stamler J, Meier P, Persantine-Aspirin Reinfarction Study. Part II. Secondary coronary prevention with persantine and aspirin. *J Am Coll Cardiol* 1986; 7:251-69 [2868029]

Thrombosis Prevention trial (W plus A), 1998:

Thrombosis prevention trial: randomised trial of low-intensity oral anticoagulation with warfarin and low-dose aspirin in the primary prevention of ischaemic heart disease in men at increased risk. The Medical Research Council's General Practice Research Framework. *Lancet* 1998;351:233-41 [9457092]

Meade TW, Wilkes HC, Stirling Y, Brennan PJ, Kelleher C, Browne W Randomized controlled trial of low dose warfarin in the primary prevention of ischaemic heart disease in men at high risk: design and pilot study. *Eur Heart J* 1988;9:836-43 [3053176]

JPPP, :

ongoing trial NCT00225849

Teramoto T, Shimada K, Uchiyama S, Sugawara M, Goto Y, Yamada N, Oikawa S, Ando K, Ishizuka N, Yamazaki T, Yokoyama K, Murata M, Ikeda Y Rationale, design, and baseline data of the Japanese Primary Prevention Project (JPPP)-a randomized, open-label, controlled trial of aspirin versus no aspirin in patients with multiple risk factors for vascular events. *Am Heart J* 2010;159:361-369.e4 [20211296] 10.1016/j.ahj.2009.11.030

CLIPS, 2007:

Catalano M, Born G, Peto R Prevention of serious vascular events by aspirin amongst patients with peripheral arterial disease: randomized, double-blind trial. *J Intern Med* 2007 Mar;261:276-84 [17305650]

AAA, 2009:

Fowkes FG, Price JF, Stewart MC, Butcher I, Leng GC, Pell AC, Sandercock PA, Fox KA, Lowe GD, Murray GD Aspirin for prevention of cardiovascular events in a general population screened for a low ankle brachial index: a randomized controlled trial. *JAMA* 2010 Mar 3;303:841-8 [20197530] 10.1001/jama.2010.221

PHS (diabetics sub group), 1989:

Final report on the aspirin component of the ongoing Physicians' Health Study. Steering Committee of the Physicians' Health Study Research Group. *N Engl J Med* 1989;321:129-35 [2664509]

Munich B, 1975:

Collaborative meta-analysis of randomised trials of antiplatelet therapy for prevention of death, myocardial infarction, and stroke in high risk patients. Antithrombotic Trialists' Collaboration BMJ 2002 Jan 12;324:71-86 [11786451]

Physicians Health Study, 1989:

Final report on the aspirin component of the ongoing Physicians' Health Study. Steering Committee of the Physicians' Health Study Research Group. N Engl J Med 1989 Jul 20;321:129-35 [2664509]

Thrombosis Prevention Trial, 1998:

Thrombosis prevention trial: randomised trial of low-intensity oral anticoagulation with warfarin and low-dose aspirin in the primary prevention of ischaemic heart disease in men at increased risk. The Medical Research Council's General Practice Research Framework. Lancet 1998 Jan 24;351:233-41 [9457092]

Meade TW, Wilkes HC, Stirling Y, Brennan PJ, Kelleher C, Browne W Randomized controlled trial of low dose warfarin in the primary prevention of ischaemic heart disease in men at high risk: design and pilot study. Eur Heart J 1988;9:836-43 [3053176]

ETDRS, 1992:

Aspirin effects on mortality and morbidity in patients with diabetes mellitus. Early Treatment Diabetic Retinopathy Study report 14. ETDRS Investigators. JAMA 1992 Sep 9;268:1292-300 [1507375]

CDPA, 1976:

, Aspirin in coronary heart disease. The Coronary Drug Project Research Group. J Chronic Dis 1976; 29:625-42 [789390]

Cardiff I, 1974:

Elwood P, Trial of acetylsalicylic acid in the secondary prevention of mortality from myocardial infarction. Br Med J (Clin Res Ed) 1981; 282:481 [6780093]

Cardiff II, 1979:

Elwood PC, Sweetnam PM, Aspirin and secondary mortality after myocardial infarction. Lancet 1979; 2:1313-5 [92668]

Vogel, 1979:

Folia Haematol 1979; 106:797-803 [0]

AMIS, 1980:

, The aspirin myocardial infarction study: final results. The Aspirin Myocardial Infarction Study research group. Circulation 1980; 62:V79-84 [7438383]

, A randomized, controlled trial of aspirin in persons recovered from myocardial infarction. JAMA 1980; 243:661-9 [6985998]

GAMIS, 1980:

Breddin K, Loew D, Lechner K, Oberla K, Walter E, The German-Austrian aspirin trial: a comparison of acetylsalicylic acid, placebo and phenprocoumon in secondary prevention of myocardial infarction. On behalf of the German-Austrian Study Group. Circulation 1980; 62:V63-72 [6777073]

PARIS, 1980:

, Persantine and aspirin in coronary heart disease. The Persantine-Aspirin Reinfarction Study Research Group. Circulation 1980; 62:449-61 [7398002]

JAMIS, 1999:

Yasue H, Ogawa H, Tanaka H, Miyazaki S, Hattori R, Saito M, Ishikawa K, Masuda Y, Yamaguchi T, Motomiya T, Tamura Y, Effects of aspirin and trapidil on cardiovascular events after acute myocardial infarction. Japanese Antiplatelets Myocardial Infarction Study (JAMIS) Investigators. Am J Cardiol 1999; 83:1308-13 [10235086]

Munich A, 1975:

Collaborative meta-analysis of randomised trials of antiplatelet therapy for prevention of death, myocardial infarction, and stroke in high risk patients. Antithrombotic Trialists' Collaboration BMJ 2002 Jan 12;324:71-86 [11786451]

HOT, 1998:

Hansson L, Zanchetti A, Carruthers SG, Dahlof B, Elmfeldt D, Julius S, Menard J, Rahn KH, Wedel H, Westerling S Effects of intensive blood-pressure lowering and low-dose aspirin in patients with hypertension: principal results of the Hypertension Optimal Treatment (HOT) randomised trial. HOT Study Group. *Lancet* 1998 Jun 13;351:1755-62 [[9635947](#)]

Hansson L, Zanchetti A The Hypertension Optimal Treatment (HOT) Study—patient characteristics: randomization, risk profiles, and early blood pressure results. *Blood Press* 1994;3:322-7 [[7866597](#)]

WHS (diabetics sub group), 2005:

Ridker PM, Cook NR, Lee IM, Gordon D, Gaziano JM, Manson JE, Hennekens CH, Buring JE A randomized trial of low-dose aspirin in the primary prevention of cardiovascular disease in women. *N Engl J Med* 2005;352:1293-304 [[15753114](#)] [10.1056/NEJMoa050613](#)

Womens Health Study, 2005:

Ridker PM, Cook NR, Lee IM, Gordon D, Gaziano JM, Manson JE, Hennekens CH, Buring JE A randomized trial of low-dose aspirin in the primary prevention of cardiovascular disease in women. *N Engl J Med* 2005 Mar 31;352:1293-304 [[15753114](#)]

Rexrode KM, Lee IM, Cook NR, Hennekens CH, Buring JE Baseline characteristics of participants in the Women's Health Study. *J Womens Health Gen Based Med* 2000;9:19-27 [[10718501](#)] [10.1089/152460900318911](#)

SAPAT, 1992:

Juul-Mller S, Edvardsson N, Jahnmatz B, Rosn A, Srensen S, Omblus R Double-blind trial of aspirin in primary prevention of myocardial infarction in patients with stable chronic angina pectoris. The Swedish Angina Pectoris Aspirin Trial (SAPAT) Group. *Lancet* 1992;340:1421-5 [[1360557](#)]

POPADAD aspirin, 2008:

Belch J, MacCuish A, Campbell I, Cobbe S, Taylor R, Prescott R, Lee R, Bancroft J, MacEwan S, Shepherd J, Macfarlane P, Morris A, Jung R, Kelly C, Connacher A, Peden N, Jamieson A, Matthews D, Leese G, McKnight J, O'Brien I, Semple C, Petrie J, Gordon D, The prevention of progression of arterial disease and diabetes (POPADAD) trial: factorial randomised placebo controlled trial of aspirin and antioxidants in patients with diabetes and asymptomatic peripheral arterial disease. *BMJ* 2008 Oct 16;337:a1840 [[18927173](#)]

Schoop, 1983:

Collaborative meta-analysis of randomised trials of antiplatelet therapy for prevention of death, myocardial infarction, and stroke in high risk patients. Antithrombotic Trialists' Collaboration *BMJ* 2002 Jan 12;324:71-86 [[11786451](#)]

DAMAD, 1989:

Diabetes 1989;38:491-8 [[2647556](#)]

Hess, 1985:

Drug-induced inhibition of platelet function delays progression of peripheral occlusive arterial disease. A prospective double-blind arteriographically controlled trial. Hess H, Mietaschk A, Deichsel G *Lancet* 1985 Feb 23;1:415-9 [[2857803](#)]

ASCEND (aspirin), 0:

ongoing trial NCT00135226

ACCEPT-D, 0:

ongoing trial ISRCTN48110081

De Berardis G, Sacco M, Evangelista V, Filippi A, Giorda CB, Tognoni G, Valentini U, Nicolucci A Aspirin and Simvastatin Combination for Cardiovascular Events Prevention Trial in Diabetes (ACCEPT-D): design of a randomized study of the efficacy of low-dose aspirin in the prevention of cardiovascular events in subjects with

diabetes mellitus treated with statins. *Trials* 2007 Aug 28;8:21 [17725825]

PARIS, 1980:

, Persantine and aspirin in coronary heart disease. The Persantine-Aspirin Reinfarction Study Research Group. *Circulation* 1980; 62:449-61 [7398002]

5 stable angina

Trial	Treatments	Patients	Trials design and methods
spinal cord stimulation vs no spinal cord stimulation			
de Jongste , 1994 n=8/9 follow-up: 8 weeks	spinal cord stimulation versus control	patients with intractable angina pectoris	Parallel groups open
Lanza , 2005 n=10/10 follow-up: 8 mo (median)	spinal cord stimulation versus no spinal cord stimulation	patients with cardiac syndrome X	Cross over open
aspirin vs placebo			
SAPAT , 1992 n=1009/1026 follow-up: 50 months	aspirin 75 mg daily versus placebo	patients with stable chronic angina pectoris	Parallel groups double blind Sweden
spinal cord stimulation vs placebo			
Eddicks , 2007 n=12/12 follow-up: 4 weeks	Spinal cord stimulation versus placebo	patients with refractory angina	Cross over double blind
spinal cord stimulation vs coronary artery bypass grafting			
ESBY , 1998 n=53/51 follow-up: 6 mo (2y)	Spinal cord stimulation versus coronary artery bypass grafting	patients with severe angina pectoris	Parallel groups open
spinal cord stimulation vs percutaneous myocardial laser revascularization			
SPiRiT , 2006 n=34/34 follow-up: 12 mo	spinal cord stimulation versus percutaneous myocardial laser revascularization	Subjects with Canadian Cardiovascular Society class 3/4 angina and reversible perfusion defects	open

More details and results :

- antithrombotics for stable angina in all type of patient at <http://www.trialresultscenter.org/go-Q33>
- spinal cord stimulation for stable angina in patients with severe/refractory angina pectoris at <http://www.trialresultscenter.org/go-Q358>

References

de Jongste , 1994:

de Jongste MJ, Hautvast RW, Hillege HL, Lie KI 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;23:1592-7 [8195519]

Jessurun GA, DeJongste MJ, Hautvast RW, Tio RA, Brouwer J, van Lelieveld S, Crijns HJ 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 Clin Electrophysiol 1999;22:1432-9 [10588144]

Lanza, 2005:

Lanza GA, Sestito A, Sgueglia GA, Infusino F, Papacci F, Visocchi M, Ierardi C, Meglio M, Bellocci F, Crea F 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;26:983-9 [15642701]

SAPAT, 1992:

Juul-Mller S, Edvardsson N, Jahnmatz B, Rosn A, Srensen S, Omblus R Double-blind trial of aspirin in primary prevention of myocardial infarction in patients with stable chronic angina pectoris. The Swedish Angina Pectoris Aspirin Trial (SAPAT) Group. Lancet 1992;340:1421-5 [1360557]

Eddicks, 2007:

Eddicks S, Maier-Hauff K, Schenk M, Mller A, Baumann G, Theres H Thoracic spinal cord stimulation improves functional status and relieves symptoms in patients with refractory angina pectoris: the first placebo-controlled randomised study. Heart 2007;93:585-90 [17237126]

ESBY, 1998:

Mannheimer C, Eliasson T, Augustinsson LE, Blomstrand C, Emanuelsson H, Larsson S, Norrsell H, Hjalmarsson A Electrical stimulation versus coronary artery bypass surgery in severe angina pectoris: the ESBY study. Circulation 1998;97:1157-63 [9537342]

Andrll P, Ekre O, Eliasson T, Blomstrand C, Brjesson M, Nilsson M, Mannheimer C Cost-effectiveness of spinal cord stimulation versus coronary artery bypass grafting in patients with severe angina pectoris—long-term results from the ESBY study. Cardiology 2003;99:20-4 [12589118]

Norrsell H, Pilhall M, Eliasson T, Mannheimer C Effects of spinal cord stimulation and coronary artery bypass grafting on myocardial ischemia and heart rate variability: further results from the ESBY study. Cardiology 2000;94:12-8 [11111139]

Ekre O, Eliasson T, Norrsell H, Whrborg P, Mannheimer C Long-term effects of spinal cord stimulation and coronary artery bypass grafting on quality of life and survival in the ESBY study. Eur Heart J 2002;23:1938-45 [12473256]

SPIRIT, 2006:

McNab D, Khan SN, Sharples LD, Ryan JY, Freeman C, Caine N, Tait S, Hardy I, Schofield PM 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;27:1048-53 [16554313]

6 hypertension

Trial	Treatments	Patients	Trials design and methods
aspirin vs placebo			

continued...

Trial	Treatments	Patients	Trials design and methods
HOT , 1998 n=9399/9391 follow-up: mean 3.8 y (range 3.3-4.9y)	aspirin 75 mg daily versus placebo	patients aged 50-80 with hypertension and diastolic blood pressure between 100 mmHG and 115 mmHG	Factorial plan Double blind Europe, North and South America, and Asia
Symplicity Spyral vs sham procedure			
SPYRAL HTN-OFF MED <i>ongoing</i> [NCT02439749] n=NA	-	-	
SPYRAL HTN-ON MED <i>ongoing</i> [NCT02439775] n=NA	-	-	

More details and results :

- antiplatelets drug for hypertension in all type of patients at <http://www.trialresultscenter.org/go-Q407>
- renal denervation for hypertension in patients with resistant hypertension at <http://www.trialresultscenter.org/go-Q693>

20

References

HOT, 1998:

Hansson L, Zanchetti A, Carruthers SG, Dahlöf B, Elmfeldt D, Julius S, Menard J, Rahn KH, Wedel H, Westerling S Effects of intensive blood-pressure lowering and low-dose aspirin in patients with hypertension: principal results of the Hypertension Optimal Treatment (HOT) randomised trial. *Lancet* 1998 Jun 13;351:1755-62 [[9635947](#)]

Hansson L, Zanchetti A The Hypertension Optimal Treatment (HOT) Study—patient characteristics: randomization, risk profiles, and early blood pressure results. *Blood Press* 1994;3:322-7 [[7866597](#)]

SPYRAL HTN-OFF MED, :

ongoing trial NCT02439749

SPYRAL HTN-ON MED, :

ongoing trial NCT02439775

7 heart failure

Trial	Treatments	Patients	Trials design and methods
spironolactone vs control			
Cicoira , 2002 n=54/52 follow-up: 12 months	spironolactone 12.5 to 50 mg/day versus control	patients with chronic heart failure	Parallel groups open
Cicoira , 2004 n=47/46 follow-up: 12 months	spironolactone versus control	chronic heart failure patients	open
Ramires , 2000 n=19/16 follow-up: 20 weeks	spironolactone versus standard medical treatment	patients with systolic dysfunction and NYHA class III CHF secondary to dilated or ischemic cardiomyopathy	Parallel groups open
aspirin vs no treatment			
WASH (aspirin) , 2004 n=91/99 follow-up: 27 months	aspirin 300 mg/day versus no treatment	patients with heart failure and left ventricular systolic dysfunction requiring diuretic therapy with LVEF <=35%	open UK, US
aspirin vs placebo			
Barzizza (ASA) , 1993 n=26/23 follow-up: 6 months	aspirin 300mg versus placebo	patients with dilated cardiomyopathy and evidence of intraventricular thrombi	Parallel groups NA
spirapril vs placebo			
CASSIS (spirapril) , 1995 n=948/48 follow-up: 12 weeks	spirapril 1.5 mg, 3 mg, 6 mg daily versus placebo	patients with chronic congestive heart failure of NYHA classes II-IV	Parallel groups double blind
spironolactone vs placebo			
Agostoni , 2005 n=14/15 follow-up: 6 months	spironolactone 25mg/d versus placebo	stable chronic heart failure patients with reduced influences lung diffusion (DLCO)	Parallel groups open Italy
Barr , 1995 n=28/14 follow-up: 8 weeks	spironolactone 50 to 100 mg/day, titrated to blood pressure and plasma potassium (added to an angiotensin-converting enzyme inhibitor) versus placebo	patients with New York Heart Association II to III congestive heart failure	Parallel groups double blind
Farquharson , 2000 n=10/10 follow-up: 4 weeks	spironolactone 50 mg/d versus placebo	patients with NYHA class II to III chronic heart failure on standard diuretic/ACE inhibitor therapy	double blind

continued...

Trial	Treatments	Patients	Trials design and methods
Macdonald , 2004 n=43/43 follow-up: 3 months	spironolactone 12.5-50 mg/d versus placebo	patients with New York Heart Association class I-II congestive heart failure taking optimal treatment (including beta blockers)	Cross over double blind
MacFadyen , 1997 n=21/16 follow-up: 8 weeks	spironolactone (50-100 mg/day) versus placebo	patients with stable chronic heart failure	Parallel groups double blind
Mottram , 2004 n=30 follow-up: 6 months	spironolactone 25 mg/d versus placebo	hypertensive patients with diastolic heart failure	double blind
RALES , 1998 n=822/841 follow-up: 24 mo	spironolactone (25 to 50 mg daily) versus placebo	patients with severe heart failure	Parallel groups Open World
Tsutamoto , 2001 n=20/17 follow-up: 12 weeks	spironolactone 25 mg daily versus placebo	patients with mild-to-moderate nonischemic congestive heart failure	Parallel groups double blind Japan
Yee , 2001 n=28/28 follow-up: 4 weeks	spironolactone 50mg/d versus placebo	patients with New York Heart Association class II to IV congestive heart failure	double blind
TOPCAT , 2014 [NCT00094302] n=3445 follow-up: 3.3 years	spironolactone (15 to 45 mg daily) versus placebo	patients with heart failure and a preserved left ventricular ejection fraction of 45% or more	Parallel groups double-blind
PIE II <i>ongoing</i> [NCT00123955] n=NA follow-up: 9 months	Spironolactone 25mg tablet daily for 9 months versus placebo	elderly patients with isolated diastolic heart failure	Parallel groups double blind
spironolactone+captopril vs captopril			
Han , 1994 n=19/16 follow-up: 4 weeks	captopril plus spironolactone versus captopril alone	patients with refractory CHF and New York Heart Association functional class IV without renal dysfunction, hypotension and hyperkalemia	open China
furosemide + spironolactone vs prenalterol			
Dalhstrom , 1986 n=10/10 follow-up: 12 weeks	intensified treatment with diuretics (furosemide- spironolactone) versus prenalterol 100-200 mg daily in addition to their basal treatment	patients with severe chronic congestive heart failure (CHF) due to ischaemic heart disease treated with digitalis and diuretics	Cross over double blind

continued...

Trial	Treatments	Patients	Trials design and methods
spironolactone+furosemide vs spironolactone+butizide			
Mauersberger , 1985 n=22 follow-up:	spironolactone 50mg + furosemide 20 mg versus spironolactone 50mg + butizide 5mg	patients with congestive heart failure	open
spironolactone vs spironolactone			
Nouvel essai <i>ongoing</i> [NCT00125437] n=NA follow-up:	spironolactone larger dose versus spironolactone standard dose	severe congestive heart failure in patients with nonischemic cardiomyopathy	Parallel groups single blind

More details and results :

- angiotensin-Converting Enzyme Inhibitors for heart failure in all type of heart failure at <http://www.trialresultscenter.org/go-Q43>
- antithrombotics for heart failure in all type of patients at <http://www.trialresultscenter.org/go-Q73>
- diuretics for heart failure in all type of patients at <http://www.trialresultscenter.org/go-Q75>
- diuretics for heart failure in patients with preserved-LVEF heart failure at <http://www.trialresultscenter.org/go-Q236>
- diuretics for heart failure in elderly at <http://www.trialresultscenter.org/go-Q314>
- aldosterone blockade for heart failure in all type of patients at <http://www.trialresultscenter.org/go-Q488>
- mineralocorticoid receptor antagonists for heart failure in all type of patients at <http://www.trialresultscenter.org/go-Q665>
- mineralocorticoid receptor antagonists for heart failure in HF pEF at <http://www.trialresultscenter.org/go-Q666>

References

Cicoira, 2002:

Cicoira M, Zanolla L, Rossi A, Golia G, Franceschini L, Brighetti G, Marino P, Zardini P, Long-term, dose-dependent effects of spironolactone on left ventricular function and exercise tolerance in patients with chronic heart failure. *J Am Coll Cardiol* 2002;40:304-10. [12106936]

Cicoira, 2004:

Cicoira M, Rossi A, Bonapace S, Zanolla L, Perrot A, Francis DP, Golia G, Franceschini L, Osterziel KJ, Zardini P, Effects of ACE gene insertion/deletion polymorphism on response to spironolactone in patients with chronic heart failure. *Am J Med* 2004;116:657-61. [15121491] [10.1016/j.amjmed.2003.12.033](https://doi.org/10.1016/j.amjmed.2003.12.033)

Ramires, 2000:

Ramires FJ, Mansur A, Coelho O, Maranhão M, Gruppi CJ, Mady C, Ramires JA, Effect of spironolactone on ventricular arrhythmias in congestive heart failure secondary to idiopathic dilated or to ischemic cardiomyopathy. *Am J Cardiol* 2000;85:1207-11. [10802002]

WASH (aspirin), 2004:

Cleland JG, Findlay I, Jafri S, Sutton G, Falk R, Bulpitt C, Prentice C, Ford I, Trainer A, Poole-Wilson PA, The Warfarin/Aspirin Study in Heart failure (WASH): a randomized trial comparing antithrombotic strategies for patients with heart failure. *Am Heart J* 2004;148:157-64. [[15215806](#)] [10.1016/j.ahj.2004.03.010](#)

Barzizza (ASA), 1993:

Barzizza F, Zocchi MT, Magnani L.p, imag Antiplatelet drugs versus warfarin in treatment of intraventricular thrombi *Eur Heart J* 1993;14(suppl):396 (Abstract P2118)

CASSIS (spirapril), 1995:

Widimsk J, Kremer HJ, Jerie P, Uhr O Czech and Slovak spirapril intervention study (CASSIS). A randomized, placebo and active-controlled, double-blind multicentre trial in patients with congestive heart failure. *Eur J Clin Pharmacol* 1995;49:95-102 [[8751029](#)]

Agostoni, 2005:

Agostoni P, Magini A, Andreini D, Contini M, Apostolo A, Bussotti M, Cattadori G, Palermo P, Spironolactone improves lung diffusion in chronic heart failure. *Eur Heart J* 2005;26:159-64. [[15618072](#)] [10.1093/eurheartj/ehi023](#)

Barr, 1995:

Barr CS, Lang CC, Hanson J, Arnott M, Kennedy N, Struthers AD, Effects of adding spironolactone to an angiotensin-converting enzyme inhibitor in chronic congestive heart failure secondary to coronary artery disease. *Am J Cardiol* 1995;76:1259-65. [[7503007](#)]

Farquharson, 2000:

Farquharson CA, Struthers AD, Spironolactone increases nitric oxide bioactivity, improves endothelial vasodilator dysfunction, and suppresses vascular angiotensin I/angiotensin II conversion in patients with chronic heart failure. *Circulation* 2000;101:594-7. [[10673249](#)]

Macdonald, 2004:

Macdonald JE, Kennedy N, Struthers AD, Effects of spironolactone on endothelial function, vascular angiotensin converting enzyme activity, and other prognostic markers in patients with mild heart failure already taking optimal treatment. *Heart* 2004;90:765-70. [[15201246](#)] [10.1136/hrt.2003.017368](#)

MacFadyen, 1997:

MacFadyen RJ, Barr CS, Struthers AD, Aldosterone blockade reduces vascular collagen turnover, improves heart rate variability and reduces early morning rise in heart rate in heart failure patients. *Cardiovasc Res* 1997;35:30-4. [[9302344](#)]

Mottram, 2004:

Mottram PM, Haluska B, Leano R, Cowley D, Stowasser M, Marwick TH, Effect of aldosterone antagonism on myocardial dysfunction in hypertensive patients with diastolic heart failure. *Circulation* 2004;110:558-65. [[15277317](#)] [10.1161/01.CIR.0000138680.89536.A9](#)

RALES, 1998:

Effectiveness of spironolactone added to an angiotensin-converting enzyme inhibitor and a loop diuretic for severe chronic congestive heart failure (the Randomized Aldactone Evaluation Study [RALES]). *Am J Cardiol* 1996;78:902-7 [[8888663](#)]

Pitt B, Zannad F, Remme WJ, Cody R, Castaigne A, Perez A, Palensky J, Wittes J The effect of spironolactone on morbidity and mortality in patients with severe heart failure. Randomized Aldactone Evaluation Study Investigators. *N Engl J Med* 1999;341:709-17 [[10471456](#)]

Pitt D, ACE inhibitor co-therapy in patients with heart failure: rationale for the Randomized Aldactone Evaluation Study (RALES). *Eur Heart J* 1995;16 Suppl N:107-10. [[8682055](#)]

Tsutamoto, 2001:

Tsutamoto T, Wada A, Maeda K, Mabuchi N, Hayashi M, Tsutsui T, Ohnishi M, Sawaki M, Fujii M, Matsumoto T, Matsui T, Kinoshita M, Effect of spironolactone on plasma brain natriuretic peptide and left ventricular remodeling in patients with congestive heart failure. *J Am Coll Cardiol* 2001;37:1228-33. [[11300427](#)]

Yee, 2001:

Yee KM, Pringle SD, Struthers AD, Circadian variation in the effects of aldosterone blockade on heart rate variability and QT dispersion in congestive heart failure. J Am Coll Cardiol 2001;37:1800-7. [[11401114](#)]

TOPCAT, 2014:

Pitt B, Pfeffer MA, Assmann SF, Boineau R, Anand IS, Claggett B, Clausell N, Desai AS, Diaz R, Fleg JL, Gordeev I, Harty B, Heitner JF, Kenwood CT, Lewis EF, O'Meara E, Probstfield JL, Shaburishvili T, Shah SJ, Solomon SD, Sweitzer NK, Yang S, McKinlay SM Spironolactone for heart failure with preserved ejection fraction. N Engl J Med 2014;370:1383-92 [[24716680](#)] [10.1056/NEJMoa1313731](#)

PIE II, :

ongoing trial NCT00123955

Han, 1994:

Han YL, Tong M, Jing QM, Hu XL, Liu JQ, Combined therapy of captopril and spironolactone for refractory congestive heart failure. Chin Med J (Engl) 1994;107:688-92. [[7805462](#)]

Dalhstrom, 1986:

Jorde R, Pettersen JE, Burhol PG Lack of effect of exogenous or endogenous gastric inhibitory polypeptide on the elimination rate of Intralipid in man. Acta Med Scand 1984;216:19-23 [[6485877](#)]

Dahlstrm U, Areskog M, Wrann B, Karlsson E Prenalterol as long-term therapy for chronic congestive heart failure. A randomized cross-over trial. Acta Med Scand 1984;216:199-207 [[6149671](#)]

Mauersberger, 1985:

Mauersberger H, Rangoonwala B, Ehrlich E, [Comparative study of 2 diuretic-containing combination preparations in patients with edematous heart failure] Wien Med Wochenschr 1985;135:205-13. [[4013351](#)]

Nouvel essai, :

ongoing trial NCT00125437

8 atrial fibrillation

Trial	Treatments	Patients	Trials design and methods
aspirin vs control			
Japanese AF Trial , 2006 n=426/445 follow-up:	aspirin at 150 to 200 mg per day versus no antiplatelet or anticoagulant therapy	patients with nonvalvular atrial fibrillation	
LASAF(aspirin vs no treatment) , 1999 n=NA follow-up:	aspirin:125mg/day(group A1);125mg on alternate days(group A2) versus no control treatment(group C)	-	Open
warfarin low dose + aspirin vs control			

continued...

Trial	Treatments	Patients	Trials design and methods
SAFT(warfarin low dose + aspirin vs no treatment) , 2003 n=334/334 follow-up: 33 months	warfarin low dose (1.25 mg/d) + aspirin 75 mg/d versus no treatment	Low-medium risk patients with non valvular atrial fibrillation.	Parallel groups Open Sweden
aspirin vs placebo			
EAFIT , 1993 n=404/378 follow-up: 2.3 years	aspirin 300 mg/d versus placebo	Patient with non rheumatic AF and recent TIA or minor ischaemic stroke(secondary prevention).	Parallel groups Double blind europe,israel
AFASAK (aspirin vs placebo) , 1989 n=336/336 follow-up: 2 years	aspirin 75 mg/d versus placebo	patients with chronic non-rheumatic atrial fibrillation	Parallel groups Double aveugle Denmark
SPAF (aspirin , warfarin eligible arm) , 1991 n=206/211 follow-up: 1.3 years	aspirin 325mg/d versus placebo	nonrheumatic atrial fibrillation,warfarin eligible patients	Parallel groups Double blind USA
SPAF (aspirin,warfarin ineligible arm) , 1991 n=346/357 follow-up: 1.3 years	aspirin 325mg/d versus placebo	nonrheumatic atrial fibrillation, warfarin ineligible patients	Parallel groups Double blind USA
aspirin vs placebo (on top fluidione)			
FFAACs , 2001 n=76/81 follow-up: 0.84 y	fluidione standard dose (target INR: 2-2.6) + aspirin low dose 100 mg versus fluidione standard dose(target INR:2-2.6) + placebo	high risk patients with non valvular atrial fibrillation	Parallel groups Double blind France
aspirin + clopidogrel vs anticoagulant			
ACTIVE W , 2006 [NCT00243178] n=3335/3371 follow-up: 1.28 y (median)	clopidogrel (75 mg per day) plus aspirin (75/100 mg per day) versus oral anticoagulation therapy (target international normalised ratio of 2030)	Patients with atrial fibrillation plus one or more risk factor for stroke	Parallel groups open
aspirin + clopidogrel vs aspirin			
ACTIVE A , 2009 [NCT00249873] n=3772/3782 follow-up: 3.7 y	clopidogrel 75 mg daily + aspirin 75-100 mg daily versus aspirin 75-100 mg daily alone	Patients with AF and at least one risk factor for stroke and who are not candidates for warfarin therapy	Parallel groups double blind

continued...

Trial	Treatments	Patients	Trials design and methods
aspirin vs coumadin low dose			
PATAF (vs coumadin low dose) , 1999 n=319/279 follow-up: 2.7 years	aspirin 300mg/d versus coumarin low dose(target INR 1.1-1.6)	non rheumatic AF,recruited in general practice,with no established indication for anticoagulation.	Parallel groups Simple aveugle Netherlands
aspirin vs coumadin standard dose			
PATAF (vs coumadin standard dose) , 1999 n=141/131 follow-up: 2.7 years	aspirin 150mg/d versus coumarin standard dose(target INR 2.5-3.5)	non rheumatic AF,recruited in general practice,with no established indication for anticoagulation.	Parallel groups Simple aveugle Netherlands
aspirin vs warfarin low dose			
AFASAK II (aspirin vs warfarin low dose) , 1998 n=169/167 follow-up: 3.5 years	aspirin 300 mg/d versus warfarin low dose (1.25mg/d)	chronic non valvular atrial fibrillation	Parallel groups Open Denmark
aspirin vs warfarin standard dose			
AFASAK (aspirin vs warfarin standard dose) , 1989 n=336/335 follow-up: 2 years	aspirin (low dose 75 mg) versus warfarin standard dose(target INR 2.8-4.2)	chronic non rheumatic AF	Parallel groups Open Denmark
AFASAK II (aspirin vs warfarin standard dose) , 1998 n=169/170 follow-up: 3.5 years	aspirin 300 mg/d versus warfarin standard dose(target INR 2-3)	chronic non valvular atrial fibrillation	Parallel groups Open Denmark
SPAF II (aspirin vs warfarin standard dose, age<75) , 1994 n=357/358 follow-up: 3.1 years	aspirin 325 mg/d versus warfarin standard dose(target INR 2.0-4.5)	non rheumatic atrial fibrillation,medium to high risk patients. Patients aged 75 and less.	Parallel groups Open USA
SPAF II (aspirin vs warfarin standard dose, age>75) , 1994 n=188/197 follow-up: 2.0 years	aspirin 325 mg/d versus warfarin standard dose (target INR 2.0-4.5)	Non rheumatic atrial fibrillation,medium to high risk patients.Patients aged more than 75.	Parallel groups Open USA
BAFTA (aspirin vs warfarin standard dose) <i>ongoing</i> n=NA follow-up:	aspirin (75 mg/d) versus warfarin standard dose (target INR:2-3)	elderly people, primary care setting	Parallel groups Open England

continued...

Trial	Treatments	Patients	Trials design and methods
warfarin + aspirin vs warfarin standard dose			
AFASAK II (warfarin low dose+aspirin vs warfarin standard dose) , 1998 n=171/170 follow-up: 3.5 years	warfarin fixed low dose(1.25mg/d) + aspirin(300mg/d) versus warfarin standard dose(target INR 2.0-3.0)	chronic non valvular atrial fibrillation	Parallel groups Open Denmark
SPAF III , 1996 n=521/523 follow-up: 1.1 years	warfarin low dose(target INR 1.2-1.5)+ aspirin 325 mg/d versus warfarin standard dose(target INR 2.0-3.0)	non rheumatic atrial fibrillation,patients with at least one additional thromboembolic risk factor(high risk patients)	Parallel groups Open USA,Canada

More details and results :

- antithrombotics for atrial fibrillation in primary prevention of thromboembolic events at <http://www.trialresultscenter.org/go-Q57>
- antithrombotics for atrial fibrillation in secondary prevention of thromboembolic events at <http://www.trialresultscenter.org/go-Q392>
- antithrombotics for atrial fibrillation in patients ineligible for warfarin at <http://www.trialresultscenter.org/go-Q565>

28

References

Japanese AF Trial, 2006:

Sato H, Ishikawa K, Kitabatake A, Ogawa S, Maruyama Y, Yokota Y, Fukuyama T, Doi Y, Mochizuki S, Izumi T, Takekoshi N, Yoshida K, Hiramori K, Origasa H, Uchiyama S, Matsumoto M, Yamaguchi T, Hori M Low-dose aspirin for prevention of stroke in low-risk patients with atrial fibrillation: Japan Atrial Fibrillation Stroke Trial. Stroke 2006 Feb;37:447-51 [16385088] 10.1161/01.STR.0000198839.61112.ee

LASAF(aspirin vs no treatment), 1999:

Posada IS, Barriales V Alternate-day dosing of aspirin in atrial fibrillation. LASAF Pilot Study Group. Am Heart J 1999 Jul;138:137-43 [10385777]

SAFT(warfarin low dose + aspirin vs no treatment), 2003:

Edvardsson N, Juul-Moller S, Omblus R, Pehrsson K Effects of low-dose warfarin and aspirin versus no treatment on stroke in a medium-risk patient population with atrial fibrillation. J Intern Med 2003 Jul;254:95-101 [12823646]

Edvardsson N, Juul-Moller S, Omblus R, Pehrsson K Effects of low-dose warfarin and aspirin versus no treatment on stroke in a medium-risk patient population with atrial fibrillation. J Intern Med 2003 Jul;254:95-101 [12823646]

EAFIT, 1993:

Secondary prevention in non-rheumatic atrial fibrillation after transient ischaemic attack or minor stroke. EAFIT (European Atrial Fibrillation Trial) Study Group. Lancet. 1993 Nov 20;342(8882):1255-62 [7901582]

AFASAK (aspirin vs placebo), 1989:

Petersen P, Boysen G, Godtfredsen J, Andersen ED, Andersen B Placebo-controlled, randomised trial of warfarin and aspirin for prevention of thromboembolic complications in chronic atrial fibrillation. The Copenhagen AFASAK study. *Lancet* 1989 Jan 28;1:175-9 [2563096]

SPAF (aspirin , warfarin eligible arm), 1991:

Stroke Prevention in Atrial Fibrillation Study. Final results *Circulation*. 1991 Aug;84(2):527-39. [1860198]

SPAF (aspirin,warfarin ineligible arm), 1991:

Stroke Prevention in Atrial Fibrillation Study. Final results *Circulation*. 1991 Aug;84(2):527-39. [1860198]

FFAACs , 2001:

Lechat P, Lardoux H, Mallet A, Sanchez P, Derumeaux G, Lecompte T, Maillard L, Mas JL, Mentre F, Pousset F, Lacomblez L, Pisica G, Solbes-Latourette S, Raynaud P, Chaumet-Riffaud P Anticoagulant (fluindione)-aspirin combination in patients with high-risk atrial fibrillation. A randomized trial (Fluindione, Fibrillation Auriculaire, Aspirin et Contraste Spontane; FFAACS). *Cerebrovasc Dis* 2001;12:245-52 [11641591]

ACTIVE W, 2006:

Connolly S, Pogue J, Hart R, Pfeffer M, Hohnloser S, Chrolavicius S, Pfeffer M, Hohnloser S, Yusuf S Clopidogrel plus aspirin versus oral anticoagulation for atrial fibrillation in the Atrial fibrillation Clopidogrel Trial with Irbesartan for prevention of Vascular Events (ACTIVE W): a randomised controlled trial. *Lancet* 2006 Jun 10;367:1903-12 [16765759]

ACTIVE A, 2009:

Effect of Clopidogrel Added to Aspirin in Patients with Atrial Fibrillation. *N Engl J Med* 2009 Apr 3;: [19336502]

PATAF (vs coumadin low dose), 1999:

Hellemons BS, Langenberg M, Lodder J, Vermeer F, Schouten HJ, Lemmens T, van Ree JW, Knottnerus JA Primary prevention of arterial thromboembolism in non-rheumatic atrial fibrillation in primary care: randomised controlled trial comparing two intensities of coumarin with aspirin. *BMJ* 1999 Oct 9;319:958-64 [10514159]

PATAF (vs coumadin standard dose), 1999:

Hellemons BS, Langenberg M, Lodder J, Vermeer F, Schouten HJ, Lemmens T, van Ree JW, Knottnerus JA Primary prevention of arterial thromboembolism in non-rheumatic atrial fibrillation in primary care: randomised controlled trial comparing two intensities of coumarin with aspirin. *BMJ* 1999 Oct 9;319:958-64 [10514159]

AFASAK II (aspirin vs warfarin low dose), 1998:

Gullov AL, Koefoed BG, Petersen P, Pedersen TS, Andersen ED, Godtfredsen J, Boysen G Fixed minidose warfarin and aspirin alone and in combination vs adjusted-dose warfarin for stroke prevention in atrial fibrillation: Second Copenhagen Atrial Fibrillation, Aspirin, and Anticoagulation Study. *Arch Intern Med* 1998 Jul 27;158:1513-21 [9679792]

AFASAK (aspirin vs warfarin standard dose), 1989:

Petersen P, Boysen G, Godtfredsen J, Andersen ED, Andersen B Placebo-controlled, randomised trial of warfarin and aspirin for prevention of thromboembolic complications in chronic atrial fibrillation. The Copenhagen AFASAK study. *Lancet* 1989 Jan 28;1:175-9 [2563096]

AFASAK II (aspirin vs warfarin standard dose), 1998:

Gullov AL, Koefoed BG, Petersen P, Pedersen TS, Andersen ED, Godtfredsen J, Boysen G Fixed minidose warfarin and aspirin alone and in combination vs adjusted-dose warfarin for stroke prevention in atrial fibrillation: Second Copenhagen Atrial Fibrillation, Aspirin, and Anticoagulation Study. *Arch Intern Med* 1998 Jul 27;158:1513-21 [9679792]

SPAF II (aspirin vs warfarin standard dose, age<75), 1994:

Warfarin versus aspirin for prevention of thromboembolism in atrial fibrillation: Stroke Prevention in Atrial Fibrillation II Study. *Lancet*. 1994 Mar 19;343(8899):687-91. [7907677]

SPAF II (aspirin vs warfarin standard dose, age>75), 1994:

Warfarin versus aspirin for prevention of thromboembolism in atrial fibrillation: Stroke Prevention in Atrial Fibrillation II Study. *Lancet*. 1994 Mar 19;343(8899):687-91. [7907677]

BAFTA (aspirin vs warfarin standard dose), 0:

ongoing trial

AFASAK II (warfarin low dose+aspirin vs warfarin standard dose), 1998:

Gullov AL, Koefoed BG, Petersen P, Pedersen TS, Andersen ED, Godtfredsen J, Boysen G Fixed minidose warfarin and aspirin alone and in combination vs adjusted-dose warfarin for stroke prevention in atrial fibrillation: Second Copenhagen Atrial Fibrillation, Aspirin, and Anticoagulation Study. *Arch Intern Med* 1998 Jul 27;158:1513-21 [9679792]

SPAF III, 1996:

Adjusted-dose warfarin versus low-intensity, fixed-dose warfarin plus aspirin for high-risk patients with atrial fibrillation: Stroke Prevention in Atrial Fibrillation III randomised clinical trial. *Lancet*. 1996 Sep 7;348(9028):633-8. [8782752]

9 acute coronary syndrome

Trial	Treatments	Patients	Trials design and methods
aspirin vs control			
Huddinge , 1988 n=10/10 follow-up: 30d (12m)	aspirin 500mg/d starting 12 h after admission and then intermittently every third day for one month versus no aspirin	patients with acute myocardial infarction	Parallel groups open
ATACS-pilot , 1990 n=37/24 follow-up: 3m	Aspirin 80mg/d (Heparin + Warfarin) versus full-dose heparin followed by warfarin	acute coronary syndromes	
Frankfurt , 1976 n=25/28 follow-up: 14d	-	-	Parallel groups
aspirin vs placebo			
VA-main , 1983 n=661/677 follow-up: 3m	Aspirin 324mg/d versus placebo	men with unstable angina	double blind
ISIS-pilot , 1987 n=313/306 follow-up: 1m	aspirin (325 mg on alternate days for 28 days) versus placebo	suspected acute myocardial infarction	Parallel groups double blind

continued...

Trial	Treatments	Patients	Trials design and methods
ISIS-2 , 1988 n=8587/8600 follow-up: 35d	160 mg/day enteric-coated aspirin for one month versus placebo	suspected acute myocardial up to 24h	Parallel groups double blind
VA-pilot <i>unpublished</i> n=26/24 follow-up: 3m	-	-	
RISC , 1990 n=474/471 follow-up: 12m	Aspirin 75mg/d versus placebo	men with unstable coronary artery disease (unstable angina or non-Q wave myocardial infarction)	Factorial plan double blind Sweden
Canadian (Aspirin vs PBO) , 1985 n=NA follow-up: 18m	Aspirin 1300mg/d versus placebo	patients with unstable angina	double blind
ALDUSA-pilot <i>unpublished</i> n=56/28 follow-up: 12m	-	-	
Dutch-aspirin , 1990 n=50/50 follow-up: 3m	aspirin (100 mg/day) for 3 months versus placebo	patients with first anterior wall AMI	Parallel groups double blind
Throux , 1988 n=121/118 follow-up: 6d (3m)	Aspirin 325 mg twice daily versus placebo	acute unstable angina	double blind
APRICOT , 1993 n=107/95 follow-up: 3m	325 mg aspirin daily with discontinuation of heparin versus placebo	Patients treated with intravenous thrombolytic therapy followed by intravenous heparin and with patent infarct-related artery demonstrated at angiography within 48 hours	Parallel groups double blind The Netherlands
aspirin + dipyridamol vs placebo			
Prandoni , 1991 n=44/44 follow-up: 12m	Aspirin 50mg/d + Dipyridamol 400mg/d versus placebo	patients with acute unstable angina	double blind
aspirin + sulfinpyrazone vs placebo			
Canadian (Aspirin + sulfinpyrazone) , 1985 n=416/139 follow-up: 18m	Aspirin 1300mg/d + sulfinpyrazone 800mg/d versus placebo	patients with unstable angina	double blind
UFH + aspirin vs placebo			

continued...

Trial	Treatments	Patients	Trials design and methods
RISC (ASP+ heparin vs PBO) , 1990 n=210/199 follow-up: 1y (5,30 and 90 days)	oral aspirin 75mg/d + intermittent IV heparin 10000UI/d followed by 7500 UI 6-hourly for 4 days versus placebo	men with unstable coronary artery disease (unstable angina or non-Q-wave myocardial infarction)	Sweden
Theroux (heparin+aspirin vs PBO) , 1988 n=122/118 follow-up: 3-9 days	heparin (1000 units per hour by intravenous infusion)+ aspirin (325 mg twice daily) versus aspirin (325 mg twice daily)	-	double blind
clopidogrel + aspirin vs aspirin			
CURE , 2001 n=6259/6303 follow-up: NA (median <9 months)	clopidogrel 300 mg immediately, followed by 75 mg once daily + aspirin for 3 to 12 months versus aspirin (+placebo)	acute coronary syndromes without ST-segment elevation within 24 hours after the onset of symptoms	Parallel groups double blind 28 countries

More details and results :

- antithrombotics for acute coronary syndrome in all type of patients at <http://www.trialresultscenter.org/go-Q24>
- antiplatelets drug for acute coronary syndrome in ACS (excluding AMI) at <http://www.trialresultscenter.org/go-Q169>
- heparin (UFH or LMWH) for acute coronary syndrome in all type of patients at <http://www.trialresultscenter.org/go-Q171>
- antiplatelets drug for acute coronary syndrome in all type of patients at <http://www.trialresultscenter.org/go-Q346>
- antiplatelets drug for acute coronary syndrome in STEMI patients at <http://www.trialresultscenter.org/go-Q564>

References

Huddinge, 1988:

Rasmanis G, Vesterqvist O, Gren K, Edhag O, Henriksson P Effects of intermittent treatment with aspirin on thromboxane and prostacyclin formation in patients with acute myocardial infarction. Lancet 1988;2:245-7 [2899236]

ATACS-pilot, 1990:

Cohen M, Adams PC, Hawkins L, Bach M, Fuster V Usefulness of antithrombotic therapy in resting angina pectoris or non-Q-wave myocardial infarction in preventing death and myocardial infarction (a pilot study from the Antithrombotic Therapy in Acute Coronary Syndromes Study Group). Am J Cardiol 1990 Dec 1;66:1287-92 [2244556]

Frankfurt, 1976:

Asasantin DVT nach Myokardinfarktp, imag Boehringer Ingelheim, 1976. (Boehringer Ingelheim internal report.)

VA-main, 1983:

Lewis HD Jr, Davis JW, Archibald DG, Steinke WE, Smitherman TC, Doherty JE 3rd, Schnaper HW, LeWinter MM, Linares E, Pouget JM, Sabharwal SC, Chesler E, DeMots H Protective effects of aspirin against acute myocardial infarction and death in men with unstable angina. Results of a Veterans Administration Cooperative Study. *N Engl J Med* 1983;309:396-403 [6135989]

ISIS-pilot, 1987:

Randomized factorial trial of high-dose intravenous streptokinase, of oral aspirin and of intravenous heparin in acute myocardial infarction. ISIS (International Studies of Infarct Survival) pilot study. *Eur Heart J* 1987;8:634-42 [2887430]

ISIS-2, 1988:

Randomised trial of intravenous streptokinase, oral aspirin, both, or neither among 17,187 cases of suspected acute myocardial infarction: ISIS-2. ISIS-2 (Second International Study of Infarct Survival) Collaborative Group. *Lancet* 1988;2:349-60 [2899772]

VA-pilot, 0:

unpublished

Lewis HD *Circulation* 1985;72 (suppl V):155-60

RISC, 1990:

Risk of myocardial infarction and death during treatment with low dose aspirin and intravenous heparin in men with unstable coronary artery disease. The RISC Group. *Lancet* 1990;336:827-30 [1976875]

Wallentin LC Aspirin (75 mg/day) after an episode of unstable coronary artery disease: long-term effects on the risk for myocardial infarction, occurrence of severe angina and the need for revascularization. Research Group on Instability in Coronary Artery Disease in Southeast Sweden. *J Am Coll Cardiol* 1991;18:1587-93 [1960301]

Canadian (Aspirin vs PBO), 1985:

Cairns JA, Gent M, Singer J, Finnie KJ, Froggatt GM, Holder DA, Jablonsky G, Kostuk WJ, Melendez LJ, Myers MG *N Engl J Med* 1985;313:1369-75 [3903504]

ALDUSA-pilot, 0:

unpublished

Unit de Pharmacologie Clinique, 1987. (Unit de Pharmacologie Clinique unpublished report)

Dutch-aspirin, 1990:

Verheugt FW, van der Laarse A, Funke-Kpper AJ, Sterkman LG, Galema TW, Roos JP Effects of early intervention with low-dose aspirin (100 mg) on infarct size, reinfarction and mortality in anterior wall acute myocardial infarction. *Am J Cardiol* 1990;66:267-70 [2195861]

Throux, 1988:

Theroux P, Ouimet H, McCans J, Latour JG, Joly P, Levy G, Pelletier E, Juneau M, Stasiak J, deGuise P Aspirin, heparin, or both to treat acute unstable angina. *N Engl J Med* 1988 Oct 27;319:1105-11 [3050522]

APRICOT, 1993:

Meijer A, Verheugt FW, Werter CJ, Lie KI, van der Pol JM, van Eenige MJ Aspirin versus coumadin in the prevention of reocclusion and recurrent ischemia after successful thrombolysis: a prospective placebo-controlled angiographic study. Results of the APRICOT Study. *Circulation* 1993;87:1524-30 [8491007]

Prandoni, 1991:

Prandoni P, Milani L, Barbiero M, Cardaioli P, Sanson A, Barbaresi F, Zonzin P, Visani L [Treatment of unstable angina with dipyridamole combined with low doses of aspirin. A multicenter pilot double-blind controlled study] *Minerva Cardioangiol* 1991;39:267-73 [1780077]

Canadian (Aspirin + sulfinpyrazone), 1985:

Cairns JA, Gent M, Singer J, Finnie KJ, Froggatt GM, Holder DA, Jablonsky G, Kostuk WJ, Melendez LJ, Myers MG Aspirin, sulfinpyrazone, or both in unstable angina. Results of a Canadian multicenter trial. N Engl J Med 1985;313:1369-75 [3903504]

RISC (ASP+ heparin vs PBO), 1990:

Risk of myocardial infarction and death during treatment with low dose aspirin and intravenous heparin in men with unstable coronary artery disease. The RISC Group. Lancet 1990 Oct 6;336:827-30 [1976875]

Theroux (heparin+aspirin vs PBO), 1988:

Throux P, Ouimet H, McCans J, Latour JG, Joly P, Lvy G, Pelletier E, Juneau M, Stasiak J, deGuise P Aspirin, heparin, or both to treat acute unstable angina. N Engl J Med 1988;319:1105-11 [3050522]

CURE, 2001:

Yusuf S, Zhao F, Mehta SR, Chrolavicius S, Tognoni G, Fox KK Effects of clopidogrel in addition to aspirin in patients with acute coronary syndromes without ST-segment elevation. N Engl J Med 2001;345:494-502 [11519503]

10 DVT prophylaxis

Trial	Treatments	Patients	Trials design and methods
IPC + aspirin vs aspirin			
Hull 2 (+asp) , 1979 n=NA follow-up:	-	patients undergoing elective knee surgery	open
Hull (+asp) , 1979 n=NA follow-up:	-	patients undergoing elective knee surgery	Parallel groups open
65279;Lieberman (A) , 1994 n=130/130 follow-up:	hypotensive epidural anesthesia, external pneumatic-compression boots, and aspirin versus hypotensive epidural anesthesia and aspirin	primary unilateral or bilateral total hip arthroplasty with use of hypotensive epidural anesthesia	Parallel groups open
aspirin vs control			
Clagett , 1975 n=56/49	A1300 versus control	-	open
Zekert VI , 1982 n=50/50	A1500 versus control	-	open
aspirin + dipyridamol vs control			

continued...

Trial	Treatments	Patients	Trials design and methods
Chicago , 1982 n=12/15 follow-up:	aspirin, 300 mg bid, and dipyridamole, 75 mg tid versus control	patients with acute spinal cord injury	Parallel groups open
dipyridamol + aspirin vs control			
Parodi I , 1973 n=40/22	Dip,A1000+Dip versus control	-	open
Parodi II , 1973 n=91/35	A1500,Dip,A+Dip versus control	-	open
Australian I , 1975 n=75/75	A1000+Dip versus control	-	open
Australian II , 1976 n=85/75	A1000+Dip versus control	-	open
Toulouse I , 1979 n=38/66	A990+Dip versus control	-	open
Zekert-III , 1977 n=135/46	A1500,A1300+Dip,A1000+Dip versus control	-	open
Harjola DVT , 1982 n=300/100	A1500,Dip,A+Dip versus control	-	open
Weiss , 1977 n=30/36	A990+Dip versus control	-	open
sp vs control			
Veth , 1985 n=120/118	Sp+Hep v Hep versus control	-	open
CECT + aspirin vs LMWH			
Gelfer , 2006 n=NA follow-up: 8 days	continuous enhanced circulation therapy (CECT) combined with low-dose aspirin versus enoxaparin 40 mg daily	patients who underwent total hip or knee arthroplasty	Parallel groups open
Aspirin vs no treatment			

continued...

Trial	Treatments	Patients	Trials design and methods
Pasteyer , 1977 n=20/20 follow-up: 2 weeks	Aspirin 1000mg daily + Hep versus control (Hep alone)	Elective orthopaedic surgery	Parallel groups
Rocha , 1986 n=60/30 follow-up: 1 weeks	Aspirin 250mg or 1000mg daily versus control (combination of heparin plus dihydroergotamine)	total hip replacement	Parallel groups open
aspirin + dipyridamol vs no treatment			
Morris-B , 1977 n=32/32 follow-up:	Aspirin 900 mg daily + dipyridamole versus control	elderly patients with hip fractures	Parallel groups open
Lyon-I , 1975 n=20/20 follow-up: 2 weeks	Aspirin 1500 mg daily + Dipyridamole versus control	Elective orthopaedic surgery	
aspirin vs placebo			
MRC , 1972 n=153/150	A600 versus placebo	general surgery	double-blind
Loew DVT , 1974 n=702/679	A600 versus Placebo	-	double-blind
Erfurt-A , 1979 n=357/357	A1500 versus Placebo	-	double-blind
Zekert V , 1980 n=50/49	A1500+Hep???	-	double-blind
Vinazzer I , 1980 n=402/404	A1500+Hep v Hep versus Placebo	-	double-blind
Vinazzer II , 1977 n=62/62	A1000+Hepv Hep versus Placebo	-	double-blind
Zekert-I , 1974 n=138/140 follow-up:	Aspirin 1500mg daily versus placebo	patients undergoing surgery of hip-joint proximal fractures	Parallel groups double-blind
Powers , 1976 n=66/63	A1300 versus placebo	traumatic orthopaedic surgery	

continued...

Trial	Treatments	Patients	Trials design and methods
Erfurt-B , 1979 n=44/44 follow-up:	A1500 versus placebo	traumatic orthopaedic surgery	double-blind
PEP hip-fracture , 2000 n=6679/6677 follow-up: 35 days	aspirin 160mg/d started preoperatively and continued for 35 days versus placebo	patients undergoing surgery for hip fracture	Parallel groups Double blind Australia, New Zealand, South Africa,
PEP elective arthroplasty , 2000 n=2047/2041 follow-up: 35 days	aspirin 160mg/d started preoperatively and continued for 35 daysA versus placebo	Patients undergoing elective hip or knee arthroplasty	Parallel groups Double blind New Zealand
Stockholm-I , 1975 n=26/25 follow-up: 2 weeks	Aspirin 2000mg daily versus placebo	elective surgery of the hip	double blind
Harris-I , 1977 n=58/59 follow-up: 1 weeks	Aspirin 1200mg daily versus placebo	patients over 40 years of age, who had undergone total hip replacement	Parallel groups double-blind
McKenna-I , 1980 n=24/12 follow-up: 2 weeks	Aspirin 975mg or 3900mg daily versus placebo	total knee replacement	Parallel groups double-blind
Sautter , 1983 n=68/77 follow-up: 3 weeks	Aspirin 900mg daily + sulfinpyrazone versus placebo	patient with total hip replacement	Parallel groups
McBride , 1983 n=21/22 follow-up: 1 weeks	A1800+Dipyridamole versus placebo	Elective orthopaedic surgery	
aspirin + dipyridamol vs placebo			
Encke-II , 1976 n=34/25 follow-up:	Aspirin 1500mg daily, Aspirin 990mg daily + dipyridamol versus placebo	patients with abdominal operations	Parallel groups double-blind
Hamburg , 1976 n=21/11 follow-up: 3 weeks	A+Dipyridamole,A1000 versus placebo	Elective orthopaedic surgery	
Frankfurt , 1981 <i>unpublished</i> n=25/14 follow-up:	A+Dip,A1320 versus placebo	patients with myocardial infarction	Parallel groups double-blind
dipyridamol + aspirin vs placebo			

continued...

Trial	Treatments	Patients	Trials design and methods
Encke IA , 1976 n=21/9	A990,A+Dip versus Placebo	-	double-blind
Encke IB , 1976 n=62/34	A1500,A990+Dip versus Placebo	-	double-blind
sp vs placebo			
Athens , 1981 n=48/48	Sp versus placebo	-	double-blind
GCS + asp vs aspirin			
Muir , 2000 n=NA follow-up:	graded compression stockings versus standard care alone	stroke	Parallel groups open (blinded assessment)
Kierkegaard , 1993 n=NA follow-up:	Graduated compression stockings were randomly fitted to one leg versus the otherleg serving as a control	myocardial infraction or ACS	
out of hospital Ardeparin vs standard prophylaxis			
Heit , 2000 n=589/572	65279;in hospital thromboprophylaxis followed by out of hospital Ardeparin 100 IU/kg once a day for a total duration of 42 days versus Ardeparin 50 IU/kg twice a day for 4-10 days	THR or TKR	
out of hospital Dalteparin vs standard prophylaxis			
Dahl , 1997 n=134/131	65279;in hospital thromboprophylaxis followed by out of hospital Dalteparin 5000 IU once a day for a total duration of 35 days versus Dalteparin 5000 IU once a day for 7 days (dextran day 0 and day 1)	THR	
Lassen , 1998 n=140/141	65279;in hospital thromboprophylaxis followed by out of hospital Dalteparin 5000 IU once a day for a total duration of 35 days versus Dalteparin 5000 IU once a day for 7 days	THR	

continued...

Trial	Treatments	Patients	Trials design and methods
Hull , 2000 n=389/180	65279;in hospital thromboprophylaxis followed by out of hospital Dalteparin 5000 IU once a day for a total duration of 35 days versus Dalteparin 5000 IU once a day or warfarin for 6 days	THR	
out of hospital Enoxaparin vs standard prophylaxis			
Bergqvist , 1996 n=117/116	65279;in hospital thromboprophylaxis followed by out of hospital Enoxaparin 40 mg once a day for a total duration of 30 days versus 65279;Enoxaparin 40 mg once a day for 10-11 days	65279;THR	
Planes , 1996 n=90/89	65279;in hospital thromboprophylaxis followed by out of hospital Enoxaparin 40 mg once a day for a total duration of 35 days versus Enoxaparin 40 mg once a day for 13-15 days	THR	
Comp , 2001 n=441/432	65279;in hospital thromboprophylaxis followed by out of hospital Enoxaparin 40 mg once a day for a total duration of 27-29 days versus Enoxaparin 30 mg twice a day for 7-10 days	THR or TKR	
out of hospital Nadroparin vs standard prophylaxis			
NPHDO , 1998 n=173/173	65279;in hospital thromboprophylaxis followed by out of hospital Nadroparin weight-adjusted for a total duration of 37-38 days versus Nadroparin weight-adjusted for 16-17 days	THR	
out of hospital UFH vs standard prophylaxis			

continued...

Trial	Treatments	Patients	Trials design and methods
Manganelli , 1998 n=79/80	65279;in hospital thromboprophylaxis followed by out of hospital UFH 5000 IU three times a day for a total duration of 30 days versus UFH 5000 IU three times a day for 15 days	THR	

More details and results :

- antithrombotics for DVT prophylaxis in orthopedic surgery at <http://www.trialresultscenter.org/go-Q37>
- antithrombotics for DVT prophylaxis in elective major knee surgery at <http://www.trialresultscenter.org/go-Q38>
- antithrombotics for DVT prophylaxis in elective hip replacement at <http://www.trialresultscenter.org/go-Q39>
- antithrombotics for DVT prophylaxis in hip Fracture at <http://www.trialresultscenter.org/go-Q40>
- antithrombotics for DVT prophylaxis in medical patients at <http://www.trialresultscenter.org/go-Q87>
- antithrombotics for DVT prophylaxis in general surgery at <http://www.trialresultscenter.org/go-Q92>
- graduated compression stockings for DVT prophylaxis in all type of patients at <http://www.trialresultscenter.org/go-Q158>
- antiplatelets drug for DVT prophylaxis in orthopedic surgery at <http://www.trialresultscenter.org/go-Q186>
- mechanical devices for thromboprophylaxis for DVT prophylaxis in all type of patients at <http://www.trialresultscenter.org/go-Q402>
- antiplatelets drug for DVT prophylaxis in general surgery at <http://www.trialresultscenter.org/go-Q461>
- antiplatelets drug for DVT prophylaxis in all type of patients at <http://www.trialresultscenter.org/go-Q462>
- antiplatelets drug for DVT prophylaxis in medical patients at <http://www.trialresultscenter.org/go-Q463>
- antiplatelets drug for DVT prophylaxis in elective orthopedic surgery at <http://www.trialresultscenter.org/go-Q464>

References

Hull 2 (+asp), 1979:

Hull R, Delmore TJ, Hirsh J, Gent M, Armstrong P, Lofthouse R, MacMillan A, Blackstone I, Reed-Davis R, Detwiler RC Effectiveness of intermittent pulsatile elastic stockings for the prevention of calf and thigh vein thrombosis in patients undergoing elective knee surgery. *Thromb Res* 1979;16:37-45 [505427]

Hull (+asp), 1979:

Hull R, Delmore TJ, Hirsh J, Gent M, Armstrong P, Lofthouse R, MacMillan A, Blackstone I, Reed-Davis R, Detwiler RC Effectiveness of intermittent pulsatile elastic stockings for the prevention of calf and thigh vein thrombosis in patients undergoing elective knee surgery. *Thromb Res* 1979;16:37-45 [505427]

65279;Lieberman (A), 1994:

Lieberman JR, Huo MM, Hanway J, Salvati EA, Sculco TP, Sharrock NE The prevalence of deep venous thrombosis after total hip arthroplasty with hypotensive epidural anesthesia. *J Bone Joint Surg Am* 1994;76:341-8 [8126039]

Clagett, 1975:

Clagett GP, Schneider P, Rosoff CB, Salzman EW The influence of aspirin on postoperative platelet kinetics and venous thrombosis. *Surgery* 1975;77:61-74 [1109518]

Zekert VI, 1982:

Zekert F, Schemper M, Neumann K Acetylsalicylic acid in combination with dihydroergotamine for preventing thromboembolism. *Haemostasis* 1982;11:149-53 [7095604]

Chicago, 1982:

Green D, Rossi EC, Yao JS, Flinn WR, Spies SM Deep vein thrombosis in spinal cord injury: effect of prophylaxis with calf compression, aspirin, and dipyridamole. *Paraplegia* 1982;20:227-34 [6813814]

Parodi I, 1973:

Parodi JC, Grandi A, Font E, Rotondaro D, Iorio J, Manrique J. El dipiridamol y el acido acetilsalicilico en la profilaxis de las trombosis venosas postoperatorias de los miembros inferiores *Dia Med* 1973;45:92-3.

Parodi II, 1973:

Parodi JC, Grandi A, Font E, Rotondaro D, Iorio J, Manrique J. El dipiridamol y el acido acetilsalicilico en la profilaxis de las trombosis venosas postoperatorias de los miembros inferiores *Dia Med* 1973;45:92-3.

Australian I, 1975:

O'Sullivan EF, Renney]T. Antiplatelet drugs in the prevention of postoperative deep vein thrombosis In: *Proceedings of III congress of Interiational Societyfor Thrombosis andHaemnostasis (Washington)*. 1972:438.

Australian II, 1976:

Renney JT, O'Sullivan EF, Burke PF Prevention of postoperative deep vein thrombosis with dipyridamole and aspirin. *Br Med J* 1976;1:992-4 [773495]

Toulouse I, 1979:

Plante J, Boneu B, Vaysse C, Barret A, Gouzi M, Bierme R Dipyridamole-aspirin versus low doses of heparin in the prophylaxis of deep venous thrombosis in abdominal surgery. *Thromb Res* 1979;14:399-403 [442014]

Zekert-III, 1977:

Zekert F. Prophylaxe von phlebothrombosen und lungenembolien mit aggregationshemmemn In: Zekert F, ed. *Thrombosen, Embolien und Aggregatonshemmerin derChirurgie*. Stuttgart: Schattauer, 1975:75-88.

Harjola DVT, 1982:

Harjola P, Meurala H, Frick AMH. Prevention of deep venous thrombosis and thrombo-embolism by dipyridamole and acetylsalicylic acid after revascularization arterial surgery. *J Cardotzasc Surg* 1980;21:451-4.

Weiss, 1977:

Weiss V, Jekiel M, Ritschard J, Bouvier CA. Prevention of the thrombo-embolic disease postoperative by the anti-aggregants in gynecological surgery. *Medicine et Hygiene (Geneve)* 1977;35:943-4.

Veth, 1985:

Veth G, Meuwissen OJ, van Houwelingen HC, Sixma JJ. Prevention of postoperative deep vein thrombosis by a combination of subcutaneous heparin with subcutaneous dihydroergotamine or oral sulphinpyrazone. *Thromb Haemost* 1985;54:570-3 [4089792]

Gelfer, 2006:

Gelfer Y, Tavor H, Oron A, Peer A, Halperin N, Robinson D. Deep vein thrombosis prevention in joint arthroplasties: continuous enhanced circulation therapy vs low molecular weight heparin. *J Arthroplasty* 2006 Feb;21:206-14 [16520208]

Pasteyer, 1977:

Flicoteaux H, Kher A, Jean N, Blery M, Judet T, Honnart F, et al. Comparison of low dose heparin and low dose heparin combined with aspirin in prevention of deep vein thrombosis after total hip replacement. *Pathol Biol (Paris)* 1977;25(suppl):55-8.

Rocha, 1986:

Alfaro MJ, Pramo JA, Rocha E. Prophylaxis of thromboembolic disease and platelet-related changes following total hip replacement: a comparative study of aspirin and heparin-dihydroergotamine. *Thromb Haemost* 1986;56:53-6 [3535158]

Morris-B, 1977:

Morris GK, Mitchell JR. Preventing venous thromboembolism in elderly patients with hip fractures: studies of low-dose heparin, dipyridamole, aspirin, and flurbiprofen. *Br Med J* 1977;1:535-7 [843794]

Lyon-I, 1975:

Dechavanne M, Ville D, Viala JJ, Kher A, Faivre J, Pousset MB, Dejour H. Controlled trial of platelet anti-aggregating agents and subcutaneous heparin in prevention of postoperative deep vein thrombosis in high risk patients. *Haemostasis* 1975;4:94-100 [1205340]

MRC, 1972:

Effect of aspirin on postoperative venous thrombosis. Report of the Steering Committee of a trial sponsored by the Medical Research Council. *Lancet* 1972;2:441-5 [4115340]

Loew DVT, 1974:

Loew D, Wellmer HK, Baer U, Merguet H, Rumpf P, Petersen H, et al. Postoperative thromboembolie-prophylaxe mit acetylsalicylsäure. *Dtsch Med Wschr* 1974;99:565-72.

Erfurt-A, 1979:

Schreiber U, Hartung B. Postoperative thromboembolieprophylaxe bei patienten mit allgemeinen chirurgischen operationen. *Chirurg* 1979;104: 1214-20.

Zekert V, 1980:

Zekert F, Hofbauer F, Mhlbacher F. Prophylaxis of thromboembolism in abdominal surgery. Comparison of low dose heparin, acetylsalicylic acid and their combination (author's transl). *MMW Munch Med Wochenschr* 1980;122:1495-8 [6780841]

Vinazzer I, 1980:

Vinazzer H, Loew D, Simma W, Brcke P Prophylaxis of postoperative thromboembolism by low dose heparin and by acetylsalicylic acid given simultaneously. A double blind study. *Thromb Res* 1980;17:177-84 [7376128]

Vinazzer II, 1977:

Loew D, Brcke P, Simma W, Vinazzer H, Dienstl E, Boehme K Acetylsalicylic acid, low dose heparin, and a combination of both substances in the prevention of postoperative thromboembolism. A double blind study. *Thromb Res* 1977;11:81-6 [329468]

Zekert-I , 1974:

Zekert F, Kohn P, Vormittag E, Poigenfrst J, Thien M [Prevention of thromboembolism using acetylsalicylic acid in the surgery of hip-joint proximal fractures] *Monatsschr Unfallheilkd Versicher Versorg Verkehrsmed* 1974;77:97-110 [4277091]

Powers , 1976:

Hansen EH, Jessing P, Lindewald H, Ostergaard P, Olesen T, Malver EI Hydroxychloroquine sulphate in prevention of deep venous thrombosis following fracture of the hip, pelvis, or thoracolumbar spine. *J Bone Joint Surg Am* 1976;58:1089-93 [1002750]

Powers PJ, Gent M, Jay RM, Julian DH, Turpie AG, Levine M, Hirsh J A randomized trial of less intense postoperative warfarin or aspirin therapy in the prevention of venous thromboembolism after surgery for fractured hip. *Arch Intern Med* 1989;149:771-4 [2650646]

Erfurt-B , 1979:

Hartung B, Schreiber U, Rdiger H [Study of the platelet aggregation inhibitor MICRISTIN as to its efficacy in the prevention of thromboembolism in the postoperative phase following surgical interventions] *Folia Haematol Int Mag Klin Morphol Blutforsch* 1979;106:810-27 [94873]

PEP hip-fracture, 2000:

Prevention of pulmonary embolism and deep vein thrombosis with low dose aspirin: Pulmonary Embolism Prevention (PEP) trial. *Lancet* 2000 Apr 15;355:1295-302 [10776741]

PEP elective arthroplasty, 2000:

Prevention of pulmonary embolism and deep vein thrombosis with low dose aspirin: Pulmonary Embolism Prevention (PEP) trial. *Lancet* 2000 Apr 15;355:1295-302 [10776741]

Stockholm-I, 1975:

Soreff J, Johnsson H, Diener L, Gransson L Acetylsalicylic acid in a trial to diminish thromboembolic complications after elective hip surgery. *Acta Orthop Scand* 1975;46:246-55 [1096521]

Harris-I, 1977:

Harris WH, Salzman EW, Athanasoulis CA, Waltman AC, DeSanctis RW Aspirin prophylaxis of venous thromboembolism after total hip replacement. *N Engl J Med* 1977;297:1246-9 [335247]

McKenna-I, 1980:

McKenna R, Galante J, Bachmann F, Wallace DL, Kaushal PS, Meredith P Prevention of venous thromboembolism after total knee replacement by high-dose aspirin or intermittent calf and thigh compression. *Br Med J* 1980;280:514-7 [6989432]

Sautter, 1983:

Sautter RD, Koch EL, Myers WO, Ray JR 3rd, Mazza JJ, Larson DE, Chen HM, Milbauer JP, Treuhaft PS, Plotka ED Aspirin-sulfinpyrazone in prophylaxis of deep venous thrombosis in total hip replacement. *JAMA* 1983;250:2649-54 [6355542]

McBride, 1983:

McBride JA, Turpie AG, Kraus V, Hiltz C. Failure of aspirin and dipyridamole to influence the incidence of leg scan detected venous thrombosis after elective hip surgery *Thrombosis et Diathesis Haemorrhagica* 1975;34:abstract 204.

Encke-II , 1976:

Encke A, Stock C, Dumke HO [Double-blind study for the prevention of postoperative thrombosis] *Chirurg* 1976;47:670-3 [[1001131](#)]

Hamburg, 1976:

Boehringer Ingelheim DVT nach Hirntumoroperationen Boehringer Ingelheim, 1976. (Internal report.)

Frankfurt, 1981:

unpublished

Boehringer Ingelheim. Asasantin DVT nach myokardinfarkt Bracknell Berkshire: Boehringer Ingelheim, 1981. (Internal report.)

Encke IA, 1976:

Encke A, Stock C, Dumke HO [Double-blind study for the prevention of postoperative thrombosis] *Chirurg* 1976;47:670-3 [[1001131](#)]

Schreiber U, Hartung B [Prevention of postoperative thromboembolism with micristin in general surgical patients (author's transl)] *Zentralbl Chir* 1979;104:1214-20 [[543338](#)]

Encke IB, 1976:

Encke A, Stock C, Dumke HO [Double-blind study for the prevention of postoperative thrombosis] *Chirurg* 1976;47:670-3 [[1001131](#)]

Athens, 1981:

Arapakis G, Trovas A, Orphanoudalus Li, Vassilikus P. sulphinpyrazone and prevention of postoperative deep venous thrombosis *Thromb Haemost* 1981;46:401.

Muir, 2000:

Muir KW, Watt A, Baxter G, Grosset DG, Lees KR Randomized trial of graded compression stockings for prevention of deep-vein thrombosis after acute stroke. *QJM* 2000;93:359-64 [[10873185](#)]

Kierkegaard, 1993:

Kierkegaard A, Norgren L Graduated compression stockings in the prevention of deep vein thrombosis in patients with acute myocardial infarction. *Eur Heart J* 1993;14:1365-8 [[8262083](#)]

Heit, 2000:

Heit JA, Elliott CG, Trowbridge AA, Morrey BF, Gent M, Hirsh J Ardeparin sodium for extended out-of-hospital prophylaxis against venous thromboembolism after total hip or knee replacement. A randomized, double-blind, placebo-controlled trial. *Ann Intern Med* 2000;132:853-61 [[10836911](#)]

Dahl, 1997:

Dahl OE, Andreassen G, Aspelin T, Mller C, Mathiesen P, Nyhus S, Abdelnoor M, Solhaug JH, Arnesen H Prolonged thromboprophylaxis following hip replacement surgery—results of a double-blind, prospective, randomised, placebo-controlled study with dalteparin (Fragmin) *Thromb Haemost* 1997;77:26-31 [[9031444](#)]

Lassen, 1998:

Lassen MR, Borris LC, Anderson BS, Jensen HP, Skej Bro HP, Andersen G, Petersen AO, Siem P, Hrlyck E, Jensen BV, Thomsen PB, Hansen BR, Erin-Madsen J, Mller JC, Rotwitt L, Christensen F, Nielsen JB, Jrgensen PS, Paaske B, Trholm C, Hvidt P, Jensen NK Efficacy and safety of prolonged thromboprophylaxis with a low molecular weight heparin (dalteparin) after total hip arthroplasty—the Danish Prolonged Prophylaxis (DaPP) Study. *Thromb Res* 1998;89:281-7 [[9669750](#)]

Hull, 2000:

Hull RD, Pineo GF, Francis C, Bergqvist D, Fellenius C, Soderberg K, Holmqvist A, Mant M, Dear R, Baylis B, Mah A, Brant R Low-molecular-weight heparin prophylaxis using dalteparin extended out-of-hospital vs in-hospital warfarin/out-of-hospital placebo in hip arthroplasty patients: a double-blind, randomized comparison.

North American Fragmin Trial Investigators. Arch Intern Med 2000;160:2208-15 [10904465]

Bergqvist, 1996:

Bergqvist D, Benoni G, Bjrgell O, Fredin H, Hedlundh U, Nicolas S, Nilsson P, Nylander G Low-molecular-weight heparin (enoxaparin) as prophylaxis against venous thromboembolism after total hip replacement. N Engl J Med 1996;335:696-700 [8703168]

Planes, 1996:

Planes A, Vochelle N, Darmon JY, Fagola M, Bellaud M, Huet Y Risk of deep-venous thrombosis after hospital discharge in patients having undergone total hip replacement: double-blind randomised comparison of enoxaparin versus placebo. Lancet 1996;348:224-8 [8684199]

Comp, 2001:

Comp PC, Spiro TE, Friedman RJ, Whitsett TL, Johnson GJ, Gardiner GA Jr, Landon GC, Jov M Prolonged enoxaparin therapy to prevent venous thromboembolism after primary hip or knee replacement. Enoxaparin Clinical Trial Group. J Bone Joint Surg Am 2001;83-A:336-45 [11263636]

NPHDO, 1998:

Haentjens P.9 Venous thromboembolism after total hip arthroplasty: areview of incidence and prevention during hospitalization and afterhospital discharge Acta Orthop Belg 2000; 66: 18

Manganelli, 1998:

Manganelli D, Pazzagli M, Mazzantini D, Punzi G, Manca M, Vignali C, Palla A, Troiani R, Rossi G Prolonged prophylaxis with unfractionated heparin is effective to reduce delayed deep vein thrombosis in total hip replacement. Respiration 1998;65:369-74 [9782219]

11 diabetes type 2

Trial	Treatments	Patients	Trials design and methods
lispro thrice daily vs basal insulin			
Raz , 2009 n=NA follow-up:	three premeal doses of insulin lispro versus NPH twice daily or insulin glargine once daily	patients with type 2 diabetes after acute myocardial infarction	
premixed insulin lispro vs basal-bolus			
Masuda , 2008 n=NA follow-up:	twice-daily 50/50 premixed insulin lispro versus NPH insulin at bedtime and preprandial insulin lispro	insulin-naive type 2 diabetic patients	
aspart + basal vs continuous infusion			
Raskin , 2003 n=NA follow-up:	multiple daily injection bolus insulin aspart and basal NPH insulin versus continuous subcutaneous insulin infusion	-	
lispro +glargine vs continuous infusion			

continued...

Trial	Treatments	Patients	Trials design and methods
Herman , 2005 n=NA follow-up:	multiple daily injection using insulin lispro and insulin glargine versus continuous subcutaneous insulin infusion using insulin lispro	-	
BIAsp 70/30 twice daily vs detemir once daily			
4T (Holman) , 2007 [ISRCTN51125379] n=235/234 follow-up: 1 year	biphasic insulin aspart (NovoMix 30) twice daily versus basal insulin detemir once daily (twice if required)	patients with a suboptimal glycated hemoglobin level (7.0 to 10.0%) who were receiving maximally tolerated doses of metformin and sulfonylurea	Parallel groups
lispro PS vs glargine			
Strojek , 2010 n=NA follow-up:	insulin lispro protamine suspension (ILPS) once or twice daily versus insulin glargine once daily	-	open-label
BIAsp 30 + MET vs glargine + GLIM			
Kann , 2006 n=NA follow-up:	twice-daily biphasic insulin aspart 30 + MET versus once-daily insulin glargine (glarg) plus glimepiride	insulin-naive patients	open-label
aspart premix vs glargine + SU			
Tamemoto , 2007 n=NA follow-up:	twice-daily 70/30 aspart premix versus once-daily glargine plus sulfonylurea	insulin-naive Japanese patients with type 2 diabetes patients insufficiently controlled with sulfonylurea	open-label
BIAsp 70/30 twice daily vs glargine once daily			
Kalra , 2010 n=76/79 follow-up: 26 weeks	BIAsp 30 once-daily biphasic insulin aspart 70/30 (NovoMix 30 FlexPen) versus insulin glargine once daily	Asian subjects with type 2 diabetes inadequately controlled with oral anti-diabetic drugs	Parallel groups open-label Asia
INITIATE (Raskin) , 2005 n=117/116 follow-up: 28 weeks	BIAsp 70/30, prebreakfast and presupper versus once-daily insulin glargine	insulin-naive patients with HbA(1c) values $\geq 8.0\%$ on $>1,000$ mg/day metformin alone or in combination with other OADs	Parallel groups open-label
Strojek , 2009 n=239/241 follow-up: 26 weeks	biphasic insulin aspart 30 (BIAsp 30) once daily versus insulin glargine once daily	patients with type 2 diabetes inadequately controlled with oral drugs	Parallel groups open-label

continued...

Trial	Treatments	Patients	Trials design and methods
lispro mixture vs glargine once daily			
Chan META-ANALYSIS , 2009 n=NA follow-up:	insulin lispro mixtures, given twice or thrice daily versus insulin glargine, given once daily	patients with type 2 diabetes treated with metformin	
premix lispro 50/50 thrice time vs glargine once daily			
Robbins , 2007 [NCT00191464] n=158/159 follow-up: 24 weeks	lispro mix 50/50 (50% insulin lispro protamine suspension [ILPS] and 50% lispro) TID for 24 weeks versus insulin glargine QD at bedtime	patients with type 2 diabetes mellitus and an HbA(1c) level of 6.5% to 11.0% , who were receiving metformin and/or a sulfonylurea with a stable dose of 0 to 2 daily insulin injections	Parallel groups open-label Australia, Greece, India, The Netherlands, Poland, Puerto Rico, and the United States
Kazda , 2006 n=54/53 follow-up: 24 week	3x daily lispro mid mixture (MidMix; 50% lispro, 50% protaminated lispro), versus 1x daily insulin glargine	patients with type 2 diabetes starting insulin treatment	Parallel groups open-label Germany
premix lispro 75/25 twice daily vs glargine once daily			
DURABLE (Buse) DOUBLONS , 2011 n=NA follow-up:	lispro mix 75/25 twice daily versus once-daily insulin glargine	type 2 diabetes patients	
DURABLE (Buse) , 2009 [NCT00279201] n=1045/1046 follow-up: 24 weeks	twice-daily lispro mix 75/25 versus daily glargine	patients with type 2 diabetes mellitus failing to achieve control with starter insulin treatment and continuing oral antihyperglycemic drugs	Parallel groups
Malone , 2004 n=105/105 follow-up: 16 week	mixture of 75% insulin lispro protamine suspension and 25% insulin lispro (Mix 75/25) BID versus insulin glargine QD	patients with type 2 diabetes beginning insulin therapy	Cross over open-label USA
Malone , 2005 n=97/97 follow-up: 32 weeks	insulin lispro mixture (25% insulin lispro and 75% NPL) twice daily versus once-daily insulin glargine	patients with Type 2 diabetes inadequately controlled with intermediate insulin, or insulin plus oral agent(s) combination therapy	Cross over
premix lispro thrice daily vs glargine once daily			
Jacober , 2006 n=60/60 follow-up: 4 months	intensive insulin lispro mixture therapy for 4 months versus once-daily insulin glargine	insulin-naive patients with type 2 diabetes receiving oral antidiabetes agents	Cross over

continued...

Trial	Treatments	Patients	Trials design and methods
lispro vs glargine once-daily			
APOLLO (Bretzel) , 2008 [NCT00311818] n=NA follow-up:	nsulin lispro administered three times per day versus insulin glargine taken once daily at the same time every day	type 2 diabetes mellitus that was inadequately controlled by oral hypoglycaemic agents	
insulin lispro protamine suspension plus lispro vs glargine plus lispro			
Koivisto , 2011 n=NA	-	-	
biphasic insulin aspart 30 vs insulin detemir			
Lundby , 2009 n=NA follow-up:	biphasic insulin aspart 30 versus insulin detemir before bedtime	-	
lispro vs insulin detemir			
Fogelfeld , 2010 n=223/219 follow-up: 24 week	Insulin lispro protamine suspension versus insulin detemir once daily at bedtime	insulin-naive patients with Type 2 diabetes	Parallel groups open-label
biphasic aspart 30 vs multiple daily injections of insulin aspart			
JDDM 11 (Hirao) , 2008 n=NA follow-up:	twice-daily injections of biphasic insulin aspart 30 versus multiple daily injections of insulin aspart	Japanese type 2 diabetic patients	
aspirin vs no treatment			
PPP (diabetics sub group) , 2003 n=519/512 follow-up: 3.6 y	aspirin 100mg daily versus control	men and women with diabetes and without a previous cardiovascular event aged >50 with >=1 risk factors for cardiovascular disease - sub group of diabetic patients	Factorial plan open Italy
JPAD , 2008 [NCT00110448] n=1262/1277 follow-up: 4.37 y median	low-dose aspirin (81 or 100 mg per day) versus no aspirin	patients with type 2 diabetes without a history of atherosclerotic disease	Parallel groups open Japan
BiAsp 70/30 vs NPH			
Kilo , 2003 n=NA follow-up:	once-daily biphasic insulin aspart 70/30 (10 min before dinner) versus once daily NPH insulin (at 10 pm)	-	
lispro + NPH vs NPH + SU			

continued...

Trial	Treatments	Patients	Trials design and methods
Bastyr , 1999 n=NA follow-up:	preprandial insulin lispro plus bedtime NPH insulin versus bedtime neutral protamine Hagedorn (NPH) insulin plus sulfonyleurea	-	
lispro insulin vs NPH insulin			
Bastyr , 2000 n=NA follow-up:	insulin lispro versus bedtime NPH insulin	-	
insulin aspart at mealtimes vs NPH insulin once daily			
Gram , 2011 n=NA follow-up:	insulin aspart at mealtimes versus NPH insulin once daily at bedtime	-	
BIAsp 70/30 twice daily vs NPH twice daily			
Christiansen , 2003 n=NA follow-up: 18 weeks	Twice daily biphasic insulin aspart (BIAsp30) versus NPH insulin twice daily	patients with type 2 diabetes not optimally controlled by oral hypoglycaemic agents, NPH insulin or a combination of both	Parallel groups double-blind
lispro + NPH vs NPH twice daily			
Ceriello , 2007 n=NA follow-up: 12 weeks	premeal insulin lispro+bedtime neutral protamine Hagedorn (NPH) versus twice-daily NPH	patients with type 2 diabetes treated by a 2-month lead-in with twice-daily NPH treatment	Cross over open-label
premix aspart70/30 twice daily vs once daily insulin glargine			
INITIATE (Raskin) DOUBLON , 2008 n=NA follow-up:	biphasic insulin aspart 70/30 (BIAsp 70/30, prebreakfast and presupper) versus once-daily insulin glargine	insulin-naive patients with HbA1c values 8.0% on 1,000 mg/day metformin alone or in combination with other OADs	Parallel groups
BIAsp 30)twice-daily + metformin vs once-daily glargine + metformin + secretagogues			
Ligthelm , 2011 n=NA follow-up: 24 weeks	biphasic insulin aspart 70/30 (BIAsp 30)twice-daily + metformin versus once-daily glargine + metformin + secretagogues	type 2 diabetic patients who were not maintaining glycemic control on basal insulin and oral antidiabetic drugs	Parallel groups open-label
taspoglutide 10mg once weekly vs placebo			

continued...

Trial	Treatments	Patients	Trials design and methods
Nauck 10 once weekly vs PBO , 2009 [NCT00423501] n=257/49 follow-up: 12 weeks	taspoglutide, either 5, 10, or 20 mg once weekly or 10 or 20 mg once every 2 weeks for 8 weeks versus placebo	patients with type 2 diabetes inadequately controlled with metformin	Parallel groups double-blind
taspoglutide 20mg once every 2 weeks vs placebo			
Nauck 20 every 2 weeks vs PBO , 2009 n=NA	-	-	
taspoglutide 20mg once weekly vs placebo			
Nauck 20 once weekly vs PBO , 2009 n=NA	-	-	

More details and results :

- antiplatelets drug for diabetes type 2 in patients without cardiovascular disease at <http://www.trialresultscenter.org/go-Q221>
- antiplatelets drug for diabetes type 2 in all type of patients at <http://www.trialresultscenter.org/go-Q362>
- insulin secretagogues peptides (incretins) for diabetes type 2 in all type of patients at <http://www.trialresultscenter.org/go-Q381>
- intensive therapy for diabetes type 2 in all type of patients at <http://www.trialresultscenter.org/go-Q459>
- antidiabetic drugs for diabetes type 2 in patients inadequately controlled on metformin at <http://www.trialresultscenter.org/go-Q509>
- antidiabetic drugs for diabetes type 2 in Patients inadequately controlled on MET+SU therapy at <http://www.trialresultscenter.org/go-Q510>
- antidiabetic drugs for diabetes type 2 in patients with insufficient glycaemic control with bitherapy at <http://www.trialresultscenter.org/go-Q511>
- antidiabetic drugs for diabetes type 2 in patients inadequately controlled on monotherapy at <http://www.trialresultscenter.org/go-Q512>
- antidiabetic drugs for diabetes type 2 in patients inadequately controlled with insulin at <http://www.trialresultscenter.org/go-Q513>
- insulin therapy for diabetes type 2 in all type of patients at <http://www.trialresultscenter.org/go-Q548>
- glucose lowering for cardiovascular prevention for diabetes type 2 in all type of patients at <http://www.trialresultscenter.org/go-Q576>

- glucose lowering for cardiovascular prevention for diabetes type 2 in meta-regression at <http://www.trialresultscenter.org/go-Q692>

References

Raz, 2009:

Raz I, Wilson PW, Strojek K, Kowalska I, Bozikov V, Gitt AK, Jermendy G, Campaigne BN, Kerr L, Milicevic Z, Jacober SJ, Effects of prandial versus fasting glycemia on cardiovascular outcomes in type 2 diabetes: the HEART2D trial. *Diabetes Care* 2009;32:381-6. [[19246588](#)] [10.2337/dc08-1671](#)

Masuda, 2008:

Masuda H, Sakamoto M, Irie J, Kitaoka A, Shiono K, Inoue G, Atsuda K, Yamada S, Comparison of twice-daily injections of biphasic insulin lispro and basal-bolus therapy: glycaemic control and quality-of-life of insulin-naive type 2 diabetic patients. *Diabetes Obes Metab* 2008;10:1261-5. [[18494811](#)] [10.1111/j.1463-1326.2008.00897.x](#)

Raskin, 2003:

Raskin P, Bode BW, Marks JB, Hirsch IB, Weinstein RL, McGill JB, Peterson GE, Mudaliar SR, Reinhardt RR Continuous subcutaneous insulin infusion and multiple daily injection therapy are equally effective in type 2 diabetes: a randomized, parallel-group, 24-week study. *Diabetes Care* 2003;26:2598-603 [[12941725](#)]

Herman, 2005:

Herman WH, Ilag LL, Johnson SL, Martin CL, Sinding J, Al Harthi A, Plunkett CD, LaPorte FB, Burke R, Brown MB, Halter JB, Raskin P A clinical trial of continuous subcutaneous insulin infusion versus multiple daily injections in older adults with type 2 diabetes. *Diabetes Care* 2005;28:1568-73 [[15983302](#)]

4T (Holman), 2007:

Holman RR, Thorne KI, Farmer AJ, Davies MJ, Keenan JF, Paul S, Levy JC, , Addition of biphasic, prandial, or basal insulin to oral therapy in type 2 diabetes. *N Engl J Med* 2007;357:1716-30. [[17890232](#)] [10.1056/NEJMoa075392](#)

Strojek, 2010:

Strojek K, Shi C, Carey MA, Jacober SJ, Addition of insulin lispro protamine suspension or insulin glargine to oral type 2 diabetes regimens: a randomized trial. *Diabetes Obes Metab* 2010;12:916-22. [[20920045](#)] [10.1111/j.1463-1326.2010.01257.x](#)

Kann, 2006:

Kann PH, Wascher T, Zackova V, Moeller J, Medding J, Szocs A, Mogan M, Mrevlje F, Regulski M, Starting insulin therapy in type 2 diabetes: twice-daily biphasic insulin Aspart 30 plus metformin versus once-daily insulin glargine plus glimepiride. *Exp Clin Endocrinol Diabetes* 2006;114:527-32. [[17115351](#)] [10.1055/s-2006-949655](#)

Tamemoto, 2007:

Tamemoto H, Ikoma A, Saitoh T, Ishikawa SE, Kawakami M, Comparison of once-daily glargine plus sulfonylurea with twice-daily 70/30 aspart premix in insulin-naive Japanese patients with diabetes. *Diabetes Technol Ther* 2007;9:246-53. [[17561795](#)] [10.1089/dia.2006.0016](#)

Kalra, 2010:

Kalra S, Plata-Que T, Kumar D, Mumtaz M, Sndergaard F, Kozlovski P, Bebakar WM, Initiation with once-daily BIAsp 30 results in superior outcome compared to insulin glargine in Asians with type 2 diabetes inadequately controlled by oral anti-diabetic drugs. *Diabetes Res Clin Pract* 2010;88:282-8. [[20363044](#)] [10.1016/j.diabres.2010.03.004](#)

INITIATE (Raskin), 2005:

Brod M, Cobden D, Lammert M, Bushnell D, Raskin P, Examining correlates of treatment satisfaction for injectable insulin in type 2 diabetes: lessons learned from a clinical trial comparing biphasic and basal analogues. *Health Qual Life Outcomes* 2007;5:8. [[17286868](#)] [10.1186/1477-7525-5-8](#)

Raskin P, Allen E, Hollander P, Lewin A, Gabbay RA, Hu P, Bode B, Garber A, , Initiating insulin therapy in type 2 Diabetes: a comparison of biphasic and basal insulin analogs. *Diabetes Care* 2005;28:260-5. [[15677776](#)]

Goodall G, Jendle JH, Valentine WJ, Munro V, Brandt AB, Ray JA, Roze S, Foos V, Palmer AJ Biphasic insulin aspart 70/30 vs. insulin glargine in insulin nave type 2 diabetes patients: modelling the long-term health economic implications in a Swedish setting. *Int J Clin Pract* 2008;62:869-76 [18479280] [10.1111/j.1742-1241.2008.01766.x](https://doi.org/10.1111/j.1742-1241.2008.01766.x)

Moses AC, Raskin P, Khutoryansky N Does serum 1,5-anhydroglucitol establish a relationship between improvements in HbA1c and postprandial glucose excursions? Supportive evidence utilizing the differential effects between biphasic insulin aspart 30 and insulin glargine. *Diabet Med* 2008 Feb;25:200-5 [18290862] [10.1111/j.1464-5491.2008.02384.x](https://doi.org/10.1111/j.1464-5491.2008.02384.x)

Strojek, 2009:

Strojek K, Bebakar WM, Khutsoane DT, Pesic M, Smahelov A, Thomsen HF, Kalra S, Once-daily initiation with biphasic insulin aspart 30 versus insulin glargine in patients with type 2 diabetes inadequately controlled with oral drugs: an open-label, multinational RCT. *Curr Med Res Opin* 2009;25:2887-94. [19821654] [10.1185/03007990903354674](https://doi.org/10.1185/03007990903354674)

Chan META-ANALYSIS, 2009:

Chan JY, Leyk M, Frier BM, Tan MH, Relationship between HbA1c and hypoglycaemia in patients with type 2 diabetes treated with different insulin regimens in combination with metformin. *Diabetes Metab Res Rev* 2009;25:224-31. [19156705] [10.1002/dmrr.929](https://doi.org/10.1002/dmrr.929)

Robbins, 2007:

Robbins DC, Beisswenger PJ, Ceriello A, Goldberg RB, Moses RG, Pagkalos EM, Milicevic Z, Jones CA, Sarwat S, Tan MH Mealtime 50/50 basal + prandial insulin analogue mixture with a basal insulin analogue, both plus metformin, in the achievement of target HbA1c and pre- and postprandial blood glucose levels in patients with type 2 diabetes: a multinational, 24-week, randomized, open-label, parallel-group comparison. *Clin Ther* 2007;29:2349-64 [18158076] [10.1016/j.clinthera.2007.11.016](https://doi.org/10.1016/j.clinthera.2007.11.016)

Robbins DC, Beisswenger PJ, Ceriello A, et al. Thrice-daily lispro mid mixture plus metformin improved glycemic control better than glargine plus metformin in patients with type 2 diabetes. *Diabetes*. 2006;55(Suppl 1):554-P. A132. Abstract

Kazda, 2006:

Kazda C, Hlstrunk H, Helsberg K, Langer F, Forst T, Hanefeld M, Prandial insulin substitution with insulin lispro or insulin lispro mid mixture vs. basal therapy with insulin glargine: a randomized controlled trial in patients with type 2 diabetes beginning insulin therapy. *J Diabetes Complications* ;20:145-52. [16632233] [10.1016/j.jdiacom.2005.09.004](https://doi.org/10.1016/j.jdiacom.2005.09.004)

DURABLE (Buse) DOUBLONS, 2011:

DURABLE (Buse), 2009:

Buse JB, Wolffenbittel BH, Herman WH, Hippler S, Martin SA, Jiang HH, Shenouda SK, Fahrbach JL, The DURABILITY of Basal versus Lispro mix 75/25 insulin Efficacy (DURABLE) trial: comparing the durability of lispro mix 75/25 and glargine. *Diabetes Care* 2011;34:249-55. [21270182] [10.2337/dc10-1701](https://doi.org/10.2337/dc10-1701)

Miser WF, Arakaki R, Jiang H, Scism-Bacon J, Anderson PW, Fahrbach JL, Randomized, open-label, parallel-group evaluations of basal-bolus therapy versus insulin lispro premixed therapy in patients with type 2 diabetes mellitus failing to achieve control with starter insulin treatment and continuing oral antihyperglycemic drugs: a noninferiority intensification substudy of the DURABLE trial. *Clin Ther* 2010;32:896-908. [20685497] [10.1016/j.clinthera.2010.05.001](https://doi.org/10.1016/j.clinthera.2010.05.001)

Wolffenbittel BH, Klaff LJ, Bhushan R, Fahrbach JL, Jiang H, Martin S, Initiating insulin therapy in elderly patients with Type 2 diabetes: efficacy and safety of lispro mix 25 vs. basal insulin combined with oral glucose-lowering agents. *Diabet Med* 2009;26:1147-55. [19929994] [10.1111/j.1464-5491.2009.02824.x](https://doi.org/10.1111/j.1464-5491.2009.02824.x)

Buse JB, Wolffenbittel BH, Herman WH, Shemonsky NK, Jiang HH, Fahrbach JL, Scism-Bacon JL, Martin SA, DURABILITY of basal versus lispro mix 75/25 insulin efficacy (DURABLE) trial 24-week results: safety and efficacy of insulin lispro mix 75/25 versus insulin glargine added to oral antihyperglycemic drugs in patients with type 2 diabetes. *Diabetes Care* 2009;32:1007-13. [19336625] [10.2337/dc08-2117](https://doi.org/10.2337/dc08-2117)

Buse JB, Wolffenbittel BH, Herman WH, Shemonsky NK, Jiang HH, Fahrbach JL, Scism-Bacon JL, Martin SA, DURABILITY of basal versus lispro mix 75/25 insulin efficacy (DURABLE) trial 24-week results: safety and efficacy of insulin lispro mix 75/25 versus insulin glargine added to oral antihyperglycemic drugs in patients with

type 2 diabetes. *Diabetes Care* 2009;32:1007-13. [19336625] [10.2337/dc08-2117](#)

Fahrback J, Jacober S, Jiang H, Martin S The DURABLE trial study design: comparing the safety, efficacy, and durability of insulin glargine to insulin lispro mix 75/25 added to oral antihyperglycemic agents in patients with type 2 diabetes. *J Diabetes Sci Technol* 2008 Sep;2:831-8 [19885269]

Malone, 2004:

Malone JK, Kerr LF, Campagne BN, Sachson RA, Holcombe JH, , Combined therapy with insulin lispro Mix 75/25 plus metformin or insulin glargine plus metformin: a 16-week, randomized, open-label, crossover study in patients with type 2 diabetes beginning insulin therapy. *Clin Ther* 2004;26:2034-44. [15823767] [10.1016/j.clinthera.2004.12.015](#)

Malone, 2005:

Malone JK, Bai S, Campagne BN, Reviriego J, Augendre-Ferrante B, Twice-daily pre-mixed insulin rather than basal insulin therapy alone results in better overall glycaemic control in patients with Type 2 diabetes. *Diabet Med* 2005;22:374-81. [15787659] [10.1111/j.1464-5491.2005.01511.x](#)

Jacober, 2006:

Jacober SJ, Scism-Bacon JL, Zagar AJ A comparison of intensive mixture therapy with basal insulin therapy in insulin-naive patients with type 2 diabetes receiving oral antidiabetes agents. *Diabetes Obes Metab* 2006;8:448-55 [16776752] [10.1111/j.1463-1326.2006.00605.x](#)

APOLLO (Bretzel), 2008:

Bretzel RG, Nuber U, Landgraf W, Owens DR, Bradley C, Linn T, Once-daily basal insulin glargine versus thrice-daily prandial insulin lispro in people with type 2 diabetes on oral hypoglycaemic agents (APOLLO): an open randomised controlled trial. *Lancet* 2008;371:1073-84. [18374840] [10.1016/S0140-6736\(08\)60485-7](#)

Koivisto, 2011:

Koivisto V, Cleall S, Pontiroli AE, Giugliano D, Comparison of insulin lispro protamine suspension versus insulin glargine once daily in basal-bolus therapies with insulin lispro in type 2 diabetes patients: a prospective randomized open-label trial. *Diabetes Obes Metab* 2011;13:1149-57. [21819517] [10.1111/j.1463-1326.2011.01484.x](#)

Lundby, 2009:

Lundby Christensen L, Almdal T, Boesgaard T, Breum L, Dunn E, Gade-Rasmussen B, Gluud C, Hedetoft C, Jarloev A, Jensen T, Krarup T, Johansen LB, Lund SS, Madsbad S, Mathiesen E, Moelvig J, Nielsen F, Perrild H, Pedersen O, Roeder M, Sneppen SB, Snorgaard Study rationale and design of the CIMT trial: the Copenhagen Insulin and Metformin Therapy trial. *Diabetes Obes Metab* 2009;11:315-22. [19267709] [10.1111/j.1463-1326.2008.00959.x](#)

Fogelfeld, 2010:

Fogelfeld L, Dharmalingam M, Robling K, Jones C, Swanson D, Jacober S, A randomized, treat-to-target trial comparing insulin lispro protamine suspension and insulin detemir in insulin-naive patients with Type 2 diabetes. *Diabet Med* 2010;27:181-8. [20546262] [10.1111/j.1464-5491.2009.02899.x](#)

JDDM 11 (Hirao), 2008:

Hirao K, Arai K, Yamauchi M, Takagi H, Kobayashi M, , Six-month multicentric, open-label, randomized trial of twice-daily injections of biphasic insulin aspart 30 versus multiple daily injections of insulin aspart in Japanese type 2 diabetic patients (JDDM 11). *Diabetes Res Clin Pract* 2008;79:171-6. [17919762] [10.1016/j.diabres.2007.08.011](#)

PPP (diabetics sub group), 2003:

Sacco M, Pellegrini F, Roncaglioni MC, Avanzini F, Tognoni G, Nicolucci A Primary prevention of cardiovascular events with low-dose aspirin and vitamin E in type 2 diabetic patients: results of the Primary Prevention Project (PPP) trial. *Diabetes Care* 2003;26:3264-72 [14633812]

JPAD, 2008:

Ogawa H, Nakayama M, Morimoto T, Uemura S, Kanauchi M, Doi N, Jinnouchi H, Sugiyama S, Saito Y Low-dose aspirin for primary prevention of atherosclerotic events in patients with type 2 diabetes: a randomized controlled trial. *JAMA* 2008;300:2134-41 [18997198]

Kilo, 2003:

Kilo C, Mezitis N, Jain R, Mersey J, McGill J, Raskin P Starting patients with type 2 diabetes on insulin therapy using once-daily injections of biphasic insulin aspart 70/30, biphasic human insulin 70/30, or NPH insulin in combination with metformin. *J Diabetes Complications* 2003;17:307-13 [[14583174](#)]

Bastyr, 1999:

Bastyr EJ, Johnson ME, Trautmann ME, Anderson JH, Vignati L, Insulin lispro in the treatment of patients with type 2 diabetes mellitus after oral agent failure. *Clin Ther* 1999;21:1703-14. [[10566566](#)]

Bastyr, 2000:

Bastyr EJ, Stuart CA, Brodows RG, Schwartz S, Graf CJ, Zagar A, Robertson KE, Therapy focused on lowering postprandial glucose, not fasting glucose, may be superior for lowering HbA1c. IOEZ Study Group. *Diabetes Care* 2000;23:1236-41. [[10977012](#)]

Gram, 2011:

Gram J, Henriksen JE, Grodum E, Juhl H, Hansen TB, Christiansen C, Yderstrde K, Gjessing H, Hansen HM, Vestergaard V, Hangaard J, Beck-Nielsen H, Pharmacological treatment of the pathogenetic defects in type 2 diabetes: the randomized multicenter South Danish Diabetes Study. *Diabetes Care* 2011;34:27-33. [[20929990](#)] [10.2337/dc10-0531](#)

Christiansen, 2003:

Christiansen JS, Vaz JA, Metelko Z, Bogoev M, Dedov I, Twice daily biphasic insulin aspart improves postprandial glycaemic control more effectively than twice daily NPH insulin, with low risk of hypoglycaemia, in patients with type 2 diabetes. *Diabetes Obes Metab* 2003;5:446-54. [[14617231](#)]

Ceriello, 2007:

Ceriello A, Del Prato S, Bue-Valleskey J, Beattie S, Gates J, de la Pea A, Malone J, Premeal insulin lispro plus bedtime NPH or twice-daily NPH in patients with type 2 diabetes: acute postprandial and chronic effects on glycemic control and cardiovascular risk factors. *J Diabetes Complications* ;21:20-7. [[17189870](#)] [10.1016/j.jdiacomp.2005.11.005](#)

INITIATE (Raskin) DOUBLON, 2008:

Goodall G, Jendle JH, Valentine WJ, Munro V, Brandt AB, Ray JA, Roze S, Foos V, Palmer AJ, Biphasic insulin aspart 70/30 vs. insulin glargine in insulin nave type 2 diabetes patients: modelling the long-term health economic implications in a Swedish setting. *Int J Clin Pract* 2008;62:869-76. [[18479280](#)] [10.1111/j.1742-1241.2008.01766.x](#)

Moses AC, Raskin P, Khutoryansky N, Does serum 1,5-anhydroglucitol establish a relationship between improvements in HbA1c and postprandial glucose excursions? Supportive evidence utilizing the differential effects between biphasic insulin aspart 30 and insulin glargine. *Diabet Med* 2008;25:200-5. [[18290862](#)] [10.1111/j.1464-5491.2008.02384.x](#)

Ray JA, Valentine WJ, Roze S, Nicklasson L, Cobden D, Raskin P, Garber A, Palmer AJ, Insulin therapy in type 2 diabetes patients failing oral agents: cost-effectiveness of biphasic insulin aspart 70/30 vs. insulin glargine in the US. *Diabetes Obes Metab* 2007;9:103-13. [[17199725](#)] [10.1111/j.1463-1326.2006.00581.x](#)

Raskin P, Allen E, Hollander P, Lewin A, Gabbay RA, Hu P, Bode B, Garber A Initiating insulin therapy in type 2 Diabetes: a comparison of biphasic and basal insulin analogs. *Diabetes Care* 2005 Feb;28:260-5 [[15677776](#)]

Ligthelm, 2011:

Ligthelm RJ, Gylvin T, DeLuzio T, Raskin P A comparison of twice-daily biphasic insulin aspart 70/30 and once-daily insulin glargine in persons with type 2 diabetes mellitus inadequately controlled on basal insulin and oral therapy: a randomized, open-label study. *Endocr Pract* 2011;17:41-50 [[20713345](#)] [10.4158/EP10079.OR](#)

Nauck 10 once weekly vs PBO, 2009:

Nauck MA, Ratner RE, Kapitza C, Berria R, Boldrin M, Balena R, Treatment with the human once-weekly glucagon-like peptide-1 analog taspoglutide in combination

with metformin improves glycemic control and lowers body weight in patients with type 2 diabetes inadequately controlled with metformin alone: a double-blind placebo-controlled study. *Diabetes Care* 2009;32:1237-43. [19366970] 10.2337/dc08-1961

Nauck 20 every 2 weeks vs PBO, 2009:

Nauck 20 once weekly vs PBO, 2009:

12 venous thrombosis

Trial	Treatments	Patients	Trials design and methods
aspirin vs discontinuation			
WARFASA , 2012 [NCT00222677] n=205/197 follow-up: 24.6 mo (median)	aspirin, 100 mg daily for 2 years versus placebo	patients with first-ever unprovoked venous thromboembolism who had completed 6 to 18 months of oral anticoagulant treatment	Parallel groups double-blind
ASPIRE , 2012 [ACTRN12605000004662] n=411/411 follow-up: 37.2 montsh (median)	-	patients who had completed initial anticoagulant therapy after a first episode of unprovoked venous thromboembolism	
aspirin vs placebo			
ASPIRE , 2012 n=411/411 follow-up: 37.2 months median	aspirin, at a dose of 100 mg daily, for up to 4 years versus placebo	patients who had completed initial anticoagulant therapy after a first episode of unprovoked venous thromboembolism	
WARFASA , 2012 n=205/197 follow-up:	aspirin, 100 mg daily for 2 years versus placebo	patients with first-ever unprovoked venous thromboembolism who had completed 6 to 18 months of oral anticoagulant treatment	

More details and results :

- antithrombotics for venous thrombosis in secondary prevention of VTE at <http://www.trialresultscenter.org/go-Q149>
- antithrombotics for venous thrombosis in secondary prevention - 2 at <http://www.trialresultscenter.org/go-Q682>

References

WARFASA, 2012:

Becattini C, Agnelli G, Schenone A, Eichinger S, Bucherini E, Silingardi M, Bianchi M, Moia M, Ageno W, Vandelli MR, Grandone E, Prandoni P Aspirin for preventing the recurrence of venous thromboembolism. N Engl J Med 2012 May 24;366:1959-67 [22621626] 10.1056/NEJMoa1114238

ASPIRE, 2012:

Brighton TA, Eikelboom JW, Mann K, Mister R, Gallus A, Ockelford P, Gibbs H, Hague W, Xavier D, Diaz R, Kirby A, Simes J Low-dose aspirin for preventing recurrent venous thromboembolism. N Engl J Med 2012;367:1979-87 [23121403]

ASPIRE, 2012:

Brighton TA, Eikelboom JW, Mann K, Mister R, Gallus A, Ockelford P, Gibbs H, Hague W, Xavier D, Diaz R, Kirby A, Simes J Low-dose aspirin for preventing recurrent venous thromboembolism. N Engl J Med 2012;367:1979-87 [23121403] 10.1056/NEJMoa1210384

WARFASA, 2012:

Becattini C, Agnelli G, Schenone A, Eichinger S, Bucherini E, Silingardi M, Bianchi M, Moia M, Ageno W, Vandelli MR, Grandone E, Prandoni P Aspirin for preventing the recurrence of venous thromboembolism. N Engl J Med 2012;366:1959-67 [22621626] 10.1056/NEJMoa1114238

13 stent

56

Trial	Treatments	Patients	Trials design and methods
clopidogrel+aspirin vs aspirin			
REAL-LATE, ZEST-LATE , 2010 [NCT00484926] n=1357/1344 follow-up: 19.2 months	clopidogrel plus aspirin versus aspirin alone	patients who had received drugeluting stents and had been free of major adverse cardiac or cerebrovascular events and major bleeding for a period of at least 12 months	Parallel groups open South Korea
cilostazol + aspirin vs aspirin			
Sekiya , 1998 n=63/63	Cilostazol 200 mg qD x6mos Aspirin 81 mg qD versus Coumadin unspecified regimen Aspirin 81 mg qD	-	
ticlopidine + aspirin vs aspirin			
STARS (vs aspirin) , 1998 n=546/557 follow-up:	Ticlopidine 250 mg BID 4 wks Aspirin 325 mg qDDage/pj versus Aspirin 325 mg qD	-	
Hall , 1996 n=13/103	Ticlopidine 250 mg BID 1 mo Aspirin 325 mg qD 5 days versus Aspirin 325 mg qD	-	
ticlopidine + aspirin vs coumadin + aspirin			

continued...

Trial	Treatments	Patients	Trials design and methods
STARS (vs coumadin+asp) , 1998 n=546/550 follow-up:	Ticlopidine 250 mg BID x4 wks Aspirin 325 mg qD versus Coumadin INR 22.5 x4 wks Aspirin 325 mg qDBID	-	
FANTASTIC , 1998 n=243/230	Ticlopidine 250 mg BID 6 wks Aspirin 100325 mg qD versus Coumadin INR 2.53.0 6 wks Aspirin 100325 mg qD/pj	-	
ISAR , 1996 n=257/260 follow-up:	Ticlopidine 250 mg BID 4 wks Aspirin 100 mg BIDage/pj versus Coumadin INR 3.54.5 4 wks Aspirin 100 mg BID	-	
MATTIS , 1998 n=177/173	Ticlopidine 250 mg BID 30 days Aspirin 250 mg qD versus Coumadin INR 2.53.0 x30 days Aspirin 250 mg qDg qD/pj	-	
Foussas , 2000 n=203/201	Ticlopidine 500mg qD 1 mo Aspirin 325 mg qD versus Coumadin INR 23 x4 wks Aspirin 325 mg qDg BID	-	
cilostazol + aspirin vs ticlopidine + aspirin			
Kozuma , 2001 n=62/63	Cilostazol 200 mg qD x6 mos Aspirin 81162 mg qD versus Ticlopidine 200 mg qD x6 mos Aspirin 81162 mg qD	-	
Ochiai , 1999 n=25/25	Cilostazol 100 mg BID x6 mos Aspirin 81 mg TID versus Ticlopidine 100 mg BID x1 mo Aspirin 81 mg TID	-	

continued...

Trial	Treatments	Patients	Trials design and methods
Park , 1999 n=247/243	Cilostazol 100 mg BID x6 mos Aspirin 200 mg qD versus Ticlopidine 250 mg BID x4 wks Aspirin 200 mg qD	-	
Yoon , 1999 n=147/149	Cilostazol 100 mg BID x30 days Aspirin 100 mg qD versus Ticlopidine 250 mg BID x30 days Aspirin 100 mg qD	-	
Kamishirado , 2002 n=65/65	Cilostazol 200 mg qD x6 mos Aspirin 81 mg qD versus Ticlopidine 200 mg qD x6 mos Aspirin 81 mg qD	-	
clopidogrel + aspirin vs ticlopidine + aspirin			
Miller , 2000 n=355/345	Clopidogrel 75 mg qD x4 wks Aspirin 100 mg qD versus Ticlopidine 250 mg BID x4 wks Aspirin 100 mg qD	-	
CLASSICS , 2000 n=345/340	Clopidogrel 300mg x1, 75 mg qD x4 wks Aspirin 325 mg qDyp versus Ticlopidine 250 mg BID x4 wks Aspirin 325 mg qD	-	
TOPPS , 2001 n=494/522	Clopidogrel 300 mg x1, unsp. Dose x2 wks Aspirin 325 mg qD versus Ticlopidine 500 mg x1, unsp. Dose x2 wks Aspirin 325 mg qD	-	
Piamsomboon , 2001 n=37/31	Clopidogrel 300 mg x1, 75 mg qD x4 wks Aspirin 300 mg BID x4 wks, 300 mg qD versus Ticlopidine 250 mg po BID x4 wks Aspirin 300 mg BID x4 wks, 300 mg qD	-	

More details and results :

- antithrombotics for stent in all type of patients at <http://www.trialresultscenter.org/go-Q151>
- dual antiplatelet therapy for stent in all type of patients at <http://www.trialresultscenter.org/go-Q578>

References

REAL-LATE, ZEST-LATE, 2010:

Park SJ, Park DW, Kim YH, Kang SJ, Lee SW, Lee CW, Han KH, Park SW, Yun SC, Lee SG, Rha SW, Seong IW, Jeong MH, Hur SH, Lee NH, Yoon J, Yang JY, Lee BK, Choi YJ, Chung WS, Lim DS, Cheong SS, Kim KS, Chae JK, Nah DY, Jeon DS, Seung KB, Jang JS, Park HS, Le Duration of dual antiplatelet therapy after implantation of drug-eluting stents. *N Engl J Med* 2010;362:1374-82 [20231231] [10.1056/NEJMoa1001266](https://doi.org/10.1056/NEJMoa1001266)

Sekiya, 1998:

Sekiya M, Funada J, Watanabe K, Miyagawa M, Akutsu H Effects of probucol and cilostazol alone and in combination on frequency of poststenting restenosis. *Am J Cardiol* 1998;82:144-7 [9678282]

STARS (vs aspirin), 1998:

Leon MB, Baim DS, Popma JJ, Gordon PC, Cutlip DE, Ho KK, Giambartolomei A, Diver DJ, Lasorda DM, Williams DO, Pocock SJ, Kuntz RE A clinical trial comparing three antithrombotic-drug regimens after coronary-artery stenting. Stent Anticoagulation Restenosis Study Investigators. *N Engl J Med* 1998;339:1665-71 [9834303]

Hall, 1996:

Hall P, Nakamura S, Maiello L, Itoh A, Blengino S, Martini G, Ferraro M, Colombo A A randomized comparison of combined ticlopidine and aspirin therapy versus aspirin therapy alone after successful intravascular ultrasound-guided stent implantation. *Circulation* 1996;93:215-22 [8548891]

STARS (vs coumadin+asp), 1998:

Leon MB, Baim DS, Popma JJ, Gordon PC, Cutlip DE, Ho KK, Giambartolomei A, Diver DJ, Lasorda DM, Williams DO, Pocock SJ, Kuntz RE A clinical trial comparing three antithrombotic-drug regimens after coronary-artery stenting. Stent Anticoagulation Restenosis Study Investigators. *N Engl J Med* 1998;339:1665-71 [9834303]

FANTASTIC, 1998:

Bertrand ME, Legrand V, Boland J, Fleck E, Bonnier J, Emmanuelson H, Vrolix M, Missault L, Chierchia S, Casaccia M, Niccoli L, Oto A, White C, Webb-Peploe M, Van Belle E, McFadden EP Randomized multicenter comparison of conventional anticoagulation versus antiplatelet therapy in unplanned and elective coronary stenting. The full anticoagulation versus aspirin and ticlopidine (fantastic) study. *Circulation* 1998;98:1597-603 [9778323]

ISAR, 1996:

Schmig A, Neumann FJ, Kastrati A, Schhlen H, Blasini R, Hadamitzky M, Walter H, Zitzmann-Roth EM, Richardt G, Alt E, Schmitt C, Ulm K A randomized comparison of antiplatelet and anticoagulant therapy after the placement of coronary-artery stents. *N Engl J Med* 1996;334:1084-9 [8598866]

MATTIS, 1998:

Urban P, Macaya C, Rupprecht HJ, Kiemeneij F, Emanuelsson H, Fontanelli A, Pieper M, Wesseling T, Sagnard L Randomized evaluation of anticoagulation versus antiplatelet therapy after coronary stent implantation in high-risk patients: the multicenter aspirin and ticlopidine trial after intracoronary stenting (MATTIS). *Circulation* 1998;98:2126-32 [9815866]

Foussas, 2000:

Foussas S, Alexopoulos D, Stefanadis C, Olympios C, Voudris V, Hatzimiltiadis S, Sionis D, Vavouranakis E, Vrahatis A, Fakiolas C, Pissimisis E, Stefanidis A, Zairis M, Pavlides G, Vitakis S, Louridas G, Cokkinos D, Toutouzas P Antiplatelet is superior to anticoagulant treatment after coronary stenting: fewer coronary and other events within 30 days after stenting. *Angiology* 2000;51:289-94 [10778998]

Kozuma, 2001:

Kozuma K, Hara K, Yamasaki M, Morino Y, Ayabe S, Kuroda Y, Tanabe K, Ikari Y, Tamura T Effects of cilostazol on late lumen loss and repeat revascularization after Palmaz-Schatz coronary stent implantation. *Am Heart J* 2001;141:124-30 [[11136497](#)]

Ochiai, 1999:

Ochiai M, Eto K, Takeshita S, Yokoyama N, Oshima A, Kondo K, Sato T, Isshiki T Impact of cilostazol on clinical and angiographic outcome after primary stenting for acute myocardial infarction. *Am J Cardiol* 1999;84:1074-6, A6, A9 [[10569666](#)]

Park, 1999:

Park SW, Lee CW, Kim HS, Lee HJ, Park HK, Hong MK, Kim JJ, Park SJ Comparison of cilostazol versus ticlopidine therapy after stent implantation. *Am J Cardiol* 1999;84:511-4 [[10482146](#)]

Yoon, 1999:

Yoon Y, Shim WH, Lee DH, Pyun WB, Kim IJ, Jang Y, Cho SY Usefulness of cilostazol versus ticlopidine in coronary artery stenting. *Am J Cardiol* 1999;84:1375-80 [[10606107](#)]

Kamishirado, 2002:

Kamishirado H, Inoue T, Mizoguchi K, Uchida T, Nakata T, Sakuma M, Takayanagi K, Morooka S Randomized comparison of cilostazol versus ticlopidine hydrochloride for antiplatelet therapy after coronary stent implantation for prevention of late restenosis. *Am Heart J* 2002;144:303-8 [[12177649](#)]

Miller, 2000:

Miller C, Bttner HJ, Petersen J, Roskamm H A randomized comparison of clopidogrel and aspirin versus ticlopidine and aspirin after the placement of coronary-artery stents. *Circulation* 2000;101:590-3 [[10673248](#)]

CLASSICS, 2000:

Bertrand ME, Rupprecht HJ, Urban P, Gershlick AH Double-blind study of the safety of clopidogrel with and without a loading dose in combination with aspirin compared with ticlopidine in combination with aspirin after coronary stenting : the clopidogrel aspirin stent international cooperative study (CLASSICS). *Circulation* 2000;102:624-9 [[10931801](#)]

TOPPS, 2001:

Taniuchi M, Kurz HI, Lasala JM Randomized comparison of ticlopidine and clopidogrel after intracoronary stent implantation in a broad patient population. *Circulation* 2001;104:539-43 [[11479250](#)]

Piamsomboon, 2001:

Piamsomboon C, Laothavorn P, Chatlaong B, Saguanwong S, Nasawadi C, Tanprasert P, Leelaprute M, Intayakorn U, Amornsak N Effectiveness of clopidogrel and aspirin versus ticlopidine and aspirin after coronary stent implantation: 1 and 6-month follow-up. *J Med Assoc Thai* 2001;84:1701-7 [[11999816](#)]

14 coronary artery disease

Trial	Treatments	Patients	Trials design and methods
aspirin vs placebo			

continued...

Trial	Treatments	Patients	Trials design and methods
CDPA , 1976 n=758/771 follow-up: 1.83 y	Aspirin (324 mg) 3x/d versus Placebo	MI survivors	Parallel groups Double blind USA
Cardiff I , 1974 n=615/624 follow-up: 2 years	Aspirin (300 mg) 1x/d versus Placebo	MI survivors	Parallel groups Double blind UK
Cardiff II , 1979 n=832/850 follow-up: 1 y	Aspirin (300 mg) 3x/d for one year versus Placebo	patients with myocardial infarction	Parallel groups Double blind South Wales
Vogel , 1979 n=672/668 follow-up: 1.75 y (mean)	Aspirin (1.5 g daily) on an average period of 22 months versus Placebo	-	Parallel groups Double blind Germany
AMIS , 1980 [NCT00000491] n=2267/2257 follow-up: >3 y	Aspirin (500 mg) 2x/d for at least 3 years versus Placebo	men and women who had had a documented myocardial infarction	Parallel groups Double blind USA
GAMIS , 1980 n=317/309 follow-up: 2 y	Aspirin (500 mg) 3x/d for 2 years versus Placebo	patients who had survived a myocardial infarction for 30-42 days	Parallel groups Double blind Germany, Austria,
PARIS , 1980 n=810/406 follow-up: 41 mo	Aspirin (324 mg) 3x/d versus Placebo	patients who had recovered from myocardial infarction	Parallel groups Double blind USA, UK
JAMIS , 1999 n=250/230 follow-up: 1.3 y (mean)	Aspirin (81 mg) 1x/d versus No antiplatelets	patients with AMI within 1 month from the onset of symptoms	Parallel groups Open Japan
SAPAT , 1992 n=1009/1026 follow-up: 50 months	aspirin 75 mg daily versus placebo	patients with stable chronic angina pectoris	Parallel groups double blind Sweden

dipyridamol + aspirin vs placebo

continued...

Trial	Treatments	Patients	Trials design and methods
PARIS , 1980 n=810/406 follow-up: 41 months (mean)	Aspirin (324 mg) + dipyridamole (75 mg) 3x/d versus Placebo	patients who had recovered from myocardial infarction	Parallel groups Double blind USA and UK
PARIS-II , 1986 n=1563/1565 follow-up: 23.4 months	Aspirin (330 mg) + dipyridamole (75 mg) 3x/d versus Placebo	patients who had recovered from myocardial infarction, suffered from 4 weeks to 4 months previously	Parallel groups Double blind USA and UK
Skeletal Myoblast Transplantation vs placebo			
Genzyme SMC00202 <i>ongoing</i> [NCT00102128] n=NA follow-up:	Cultured Autologous Skeletal Myoblast Transplantation versus placebo	patient with prior myocardial infarction and referred for CABG	Parallel groups double blind
dipyridamol + aspirin vs aspirin			
PARIS , 1980 n=810/810 follow-up: 41 months	Aspirin (324 mg) + dipyridamole (75 mg) 3x/d versus Aspirin (324 mg) 3x/d	patuents who had recovered from myocardial infarction	Parallel groups Double blind USA and GB

62

More details and results :

- cell-based therapies for coronary artery disease in all type of patients at <http://www.trialresultscenter.org/go-Q300>
- death and events prevention for coronary artery disease in all type of patients at <http://www.trialresultscenter.org/go-Q450>

References

CDPA, 1976:

, Aspirin in coronary heart disease. The Coronary Drug Project Research Group. J Chronic Dis 1976; 29:625-42 [789390]

Cardiff I, 1974:

Elwood P, Trial of acetylsalicylic acid in the secondary prevention of mortality from myocardial infarction. Br Med J (Clin Res Ed) 1981; 282:481 [6780093]

Cardiff II, 1979:

Elwood PC, Sweetnam PM, Aspirin and secondary mortality after myocardial infarction. Lancet 1979; 2:1313-5 [92668]

Vogel, 1979:

Folia Haematol 1979; 106:797-803 [0]

AMIS, 1980:

, The aspirin myocardial infarction study: final results. The Aspirin Myocardial Infarction Study research group. Circulation 1980; 62:V79-84 [7438383]

, A randomized, controlled trial of aspirin in persons recovered from myocardial infarction. JAMA 1980; 243:661-9 [6985998]

GAMIS, 1980:

Breiddin K, Loew D, Lechner K, Oberla K, Walter E, The German-Austrian aspirin trial: a comparison of acetylsalicylic acid, placebo and phenprocoumon in secondary prevention of myocardial infarction. On behalf of the German-Austrian Study Group. *Circulation* 1980; 62:V63-72 [6777073]

PARIS, 1980:

, Persantine and aspirin in coronary heart disease. The Persantine-Aspirin Reinfarction Study Research Group. *Circulation* 1980; 62:449-61 [7398002]

JAMIS, 1999:

Yasue H, Ogawa H, Tanaka H, Miyazaki S, Hattori R, Saito M, Ishikawa K, Masuda Y, Yamaguchi T, Motomiya T, Tamura Y, Effects of aspirin and trapidil on cardiovascular events after acute myocardial infarction. Japanese Antiplatelets Myocardial Infarction Study (JAMIS) Investigators. *Am J Cardiol* 1999; 83:1308-13 [10235086]

SAPAT, 1992:

Juul-Mller S, Edvardsson N, Jahnmatz B, Rosn A, Srensen S, Omblus R Double-blind trial of aspirin in primary prevention of myocardial infarction in patients with stable chronic angina pectoris. The Swedish Angina Pectoris Aspirin Trial (SAPAT) Group. *Lancet* 1992;340:1421-5 [1360557]

PARIS, 1980:

, Persantine and aspirin in coronary heart disease. The Persantine-Aspirin Reinfarction Study Research Group. *Circulation* 1980; 62:449-61 [7398002]

, Persantine and aspirin in coronary heart disease. The Persantine-Aspirin Reinfarction Study Research Group. *Circulation* 1980; 62:449-61 [7398002]

PARIS-II, 1986:

Klimt CR, Knatterud GL, Stamler J, Meier P, Persantine-Aspirin Reinfarction Study. Part II. Secondary coronary prevention with persantine and aspirin. *J Am Coll Cardiol* 1986; 7:251-69 [2868029]

Genzyme SMC00202, :

ongoing trial NCT00102128

PARIS, 1980:

, Persantine and aspirin in coronary heart disease. The Persantine-Aspirin Reinfarction Study Research Group. *Circulation* 1980; 62:449-61 [7398002]

15 CABG surgery

Trial	Treatments	Patients	Trials design and methods
clopidogrel+aspirin vs aspirin			
CASCADE , 2009 [NCT00228423] n=56/57 follow-up: 1 y	aspirin 162 mg plus clopidogrel 75 mg daily for 1 year versus aspirin 162 mg plus placebo daily	patients after CABG involving at least two saphenous vein grafts	Parallel groups double blind
aspirin + dipyridamol vs control			
Pantely , 1979 n=18/30 follow-up: 6m	aspirin 325 mg three times a day + dipyridamole 75 mg three times a day versus control	patients undergoing aortocoronary saphenous-vein bypass-graft surgery	open

continued...

Trial	Treatments	Patients	Trials design and methods
Brussels , 1987 n=24/25 follow-up: 12m	-	-	
Czech , 1986 n=47/46 follow-up: 12m	aspirin 1000 + dipyridamol 225 versus control (no medication)	Patients with aortocoronary bypasses with intraoperative blood flow rates of 40 ml/min or less	open
Des Moines , 1980 n=60/54 follow-up: 12m	-	-	
aspirin vs placebo			
McEnany , 1982 n=71/77 follow-up: 22m	aspirin 1200 versus placebo	patients undergoing coronary bypass grafting	double blind
Lorenz , 1984 n=29/31 follow-up: 4m	aspirin 100 mg/d versus placebo	patients undergoing CABG	double blind
GESIC (aspirin) , 1990 n=373/371 follow-up: 28d	aspirin 150 mg daily versus placebo	patients undergoing CABG	Parallel groups double blind
Sydney , 1991 n=127/110 follow-up: 12m	aspirin 324 mg daily versus placebo	patients undergoing CABG	double blind
Hockings , 1993 n=72/72 follow-up: 6m	aspirin 100 versus placebo	patients undergoing CABG	double blind
aspirin + dipyridamol vs placebo			
GESIC (aspirin+dipyridamol) , 1990 n=368/371 follow-up: 28d	aspirin 50 mg + dipyridamole 75mg 3 times daily versus placebo	patients undergoing CABG	Parallel groups double blind Spain
Brooks , 1985 n=160/160 follow-up: 12m	aspirin 990 mg and dipyridamole 225 mg daily versus placebo	patients undergoing coronary bypass grafting	double blind
Mayo-A , 1984 n=202/205 follow-up: 12m	aspirin 975 + dipyridamol 225 versus placebo	patients undergoing coronary bypass grafting	double blind

continued...

Trial	Treatments	Patients	Trials design and methods
Wadsworth , 1985 n=96/102 follow-up: 12m	aspirin 975 mg/d + dipyridamol 225 mg/d, aspirin 975 mg/d versus placebo	coronary bypass patients	double blind
Basel , 1989 n=62/63 follow-up: 9m	aspirin 50 + dipyridamol 400 versus placebo	patients who had aortocoronary vein bypass surgery	double blind
Leeds-B , 1985 n=61/64 follow-up: 6m	aspirin 990 + dipyridamol 225 (W) versus placebo	patients undergoing aorta-coronary bypass grafting for disabling angina	double blind
Thaulow , 1987 n=34/35 follow-up: 3m	aspirin 975 + dipyridamol 225 versus placebo	Patients scheduled to receive at least three aortocoronary venous bypass grafts	double blind

More details and results :

- antiplatelets drug for CABG surgery in all type of patients at <http://www.trialresultscenter.org/go-Q225>

References

CASCADE, 2009:

Kulik A, Le May M, Wells GA, Mesana TG, Ruel M The clopidogrel after surgery for coronary artery disease (CASCADE) randomized controlled trial: clopidogrel and aspirin versus aspirin alone after coronary bypass surgery [NCT00228423]. *Curr Control Trials Cardiovasc Med* 2005 Oct 11;6:15 [16219100]

Kulik A, Le May MR, Voisine P, Tardif JC, Delarochelliere R, Naidoo S, Wells GA, Mesana TG, Ruel M Aspirin plus clopidogrel versus aspirin alone after coronary artery bypass grafting: the clopidogrel after surgery for coronary artery disease (CASCADE) Trial. *Circulation* 2010 Dec 21;122:2680-7 [21135365] [10.1161/CIRCULATIONAHA.110.978007](https://doi.org/10.1161/CIRCULATIONAHA.110.978007)

Pantely, 1979:

Pantely GA, Goodnight SH Jr, Rahimtoola SH, Harlan BJ, DeMots H, Calvin L, Rsch J Failure of antiplatelet and anticoagulant therapy to improve patency of grafts after coronary-artery bypass: a controlled, randomized study. *N Engl J Med* 1979;301:962-6 [386118]

Brussels, 1987:

Lavenne-Pardonge E, Col-de Beys C, Dion R, Ponlot R, Moriau M.A Effect of antiaggregant on occlusion of saphenous graft coronary bypass *Thromb Haemost* 1987;58:547 (Abstract 2024)

Czech, 1986:

Pirk J, Vojcek J, Kovc J, Fabin J, Firt P Improved patency of the aortocoronary bypass by antithrombotic drugs. *Ann Thorac Surg* 1986;42:312-4 [3489445]

Des Moines, 1980:

Klotz L Antiplatelet and anticoagulant therapy after coronary bypass. *N Engl J Med* 1980;302:866 [6965764]

McEnany, 1982:

McEnany MT, Salzman EW, Mundth ED, DeSanctis RW, Harthorne JW, Weintraub RM, Gates S, Austen WG The effect of antithrombotic therapy on patency rates of saphenous vein coronary artery bypass grafts. *J Thorac Cardiovasc Surg* 1982;83:81-9 [7033673]

Lorenz, 1984:

Meister W, von Schacky C, Weber M, Lorenz R, Kotzur J, Reichart B, Theisen K, Weber PC Low-dose acetylsalicylic acid (100 mg/day) after aortocoronary bypass surgery: a placebo-controlled trial. *Br J Clin Pharmacol* 1984;17:703-11 [6378232]

GESIC (aspirin), 1990:

Sanz G, Pajarn A, Alegria E, Coello I, Cardona M, Fournier JA, Gmez-Recio M, Ruano J, Hidalgo R, Medina A Prevention of early aortocoronary bypass occlusion by low-dose aspirin and dipyridamole. Grupo Espaol para el Seguimiento del Injerto Coronario (GESIC) *Circulation* 1990;82:765-73 [2203555]

Sydney, 1991:

Gavaghan TP, GebSKI V, Baron DW Immediate postoperative aspirin improves vein graft patency early and late after coronary artery bypass graft surgery. A placebo-controlled, randomized study. *Circulation* 1991;83:1526-33 [2022014]

Hockings, 1993:

Hockings BE, Ireland MA, Gotch-Martin KF, Taylor RR Placebo-controlled trial of enteric coated aspirin in coronary bypass graft patients. Effect on graft patency. *Med J Aust* 1993;159:376-8 [8377686]

GESIC (aspirin+dipyridamol), 1990:

Sanz G, Pajarn A, Alegria E, Coello I, Cardona M, Fournier JA, Gmez-Recio M, Ruano J, Hidalgo R, Medina A *Circulation* 1990;82:765-73 [2203555]

Brooks, 1985:

Brooks N, Wright J, Sturridge M, Pepper J, Magee P, Walesby R, Layton C, Honey M, Balcon R Randomised placebo controlled trial of aspirin and dipyridamole in the prevention of coronary vein graft occlusion. *Br Heart J* 1985;53:201-7 [3881108]

Mayo-A, 1984:

Chesebro JH, Fuster V, Elveback LR, Clements IP, Smith HC, Holmes DR Jr, Bardsley WT, Pluth JR, Wallace RB, Puga FJ Effect of dipyridamole and aspirin on late vein-graft patency after coronary bypass operations. *N Engl J Med* 1984;310:209-14 [6361561]

Wadsworth, 1985:

Brown BG, Cukingnan RA, DeRouen T, Goede LV, Wong M, Fee HJ, Roth JA, Carey JS Improved graft patency in patients treated with platelet-inhibiting therapy after coronary bypass surgery. *Circulation* 1985;72:138-46 [3874009]

Basel, 1989:

Pfisterer M, Burkart F, Jockers G, Meyer B, Regenass S, Burckhardt D, Schmitt HE, Mller-Brand J, Skarvan K, Stulz P Trial of low-dose aspirin plus dipyridamole versus anticoagulants for prevention of aortocoronary vein graft occlusion. *Lancet* 1989;2:1-7 [2567792]

Leeds-B, 1985:

Rajah SM, Salter MC, Donaldson DR, Subba Rao R, Boyle RM, Partridge JB, Watson DA Acetylsalicylic acid and dipyridamole improve the early patency of aorta-coronary bypass grafts. A double-blind, placebo-controlled, randomized trial. *J Thorac Cardiovasc Surg* 1985;90:373-7 [3897722]

Thaulow, 1987:

Thaulow E, Frysaker T, Dale J, Vatne K Failure of combined acetylsalicylic acid and dipyridamole to prevent occlusion of aortocoronary venous bypass graft. *Scand J Thorac Cardiovasc Surg* 1987;21:215-20 [3501902]

Entry terms: enoxaparin, Lovenox, Clexane, spironolactone, Veroshpiron, Verospirone, Spiractin, Spirobeta, Spirogamma, Spirolang, Spirono-Isis, Spirono Isis, Spironone, Spirospare, Verospiron, Aldactone, Aldactone A, Aquareduct, duraspiron, Espironolactona Alter, Es-

pironolactona Mundogen, Flumach, Frumikal, Jenaspiron, Novo-Spiroton, Novo Spiroton, NovoSpiroton, Practon, Spiro L.U.T., spiro von ct, , aspirin, clopidogrel, Plavix, Iscover, ardeparin, dipyridamol, dipyridamole monoacetate, dipyridamol monoacetate, , heparin, Heparin, Unfractionated Heparin, Heparinic Acid, Liquaemin, Sodium Heparin, Heparin Sodium, alpha-Heparin, alpha Heparin, , nadroparin, Nadroparine, Fraxiparin, Fraxiparine, CY 216, CY-216, CY216, LMF CY-216, LMF CY 216, LMF CY216, , dalteparin, rivaroxaban, Xarelto, BAY 59-7939,