

Clinical trials of beta-blockers for acute myocardial infarction in long term beta-blockers

TrialResults-center www.trialresultscenter.org

1 Long term treatment

Trial	Treatments	Patients	Trials design and methods
Propranolol vs control			
Aronow , 1997 n=79/79 follow-up: 1 year	Propranolol 30 mg 3 times daily versus no propranolol	patients ≥ 62 years of age with New York Heart Association functional class II or III CHF, prior Qwave myocardial infarction, and a LV ejection fraction $< 40\%$ after 2 months of treatment with diuretics and ACE inhibitors	Parallel groups USA
Acebutolol vs placebo			
APSI , 1990 n=298/309 follow-up: 318 days	Acebutolol 200mg twice daily versus placebo	patient surviving MI at high risk	Parallel groups Double blind France
Alprenolol vs placebo			
Andersen , 1979 n=238/242 follow-up: About 1 year	Alprenolol 5-10 mg intravenously, followed by 200 mg twice a day versus placebo	patients years with definite or suspected myocardial infarction	Parallel groups Double blind Denmark
Wilhelmsson , 1974 n=114/116 follow-up: 2 years	Alprenolol 200mg twice daily versus placebo	patient aged 57-67 years discharge alive after acute myocardial infarction	Parallel groups Double blind Sweden
Carvedilol vs placebo			
Basu , 1997 n=77/74 follow-up: 6 months	Carvedilol target dose 25 mg BID versus placebo	Patients with acute MI < 24 h	Parallel groups Double blind UK
Metoprolol vs placebo			
LIT Research Group , 1987 n=1195/1200 follow-up: 18 months	Metoprolol 100 mg bid versus placebo	patients, 45 to 74 years of age, surviving a recent acute MI	Parallel groups Double blind USA
Hjalmarson , 1981 n=698/697 follow-up: 2 years	Metoprolol 100mg twice daily (initial dose intravenously) versus placebo	patients aged between 40 -74 years with suspected MI and onset of infarction within the previous 48h	Parallel groups Double blind Sweden

continued...

Trial	Treatments	Patients	Trials design and methods
Manger Cats , 1983 n=273/280 follow-up: 1 year	Metoprolol 100mg twice daily versus placebo	MI, NYHA Class I or II and <=70 y	Parallel groups Double blind Netherlands
Rehnqvist , 1983 n=154/147 follow-up: 36 months	Metoprolol 100mg twice daily versus placebo	AMI patients <70 years in sinus rythm without complete BBB	Parallel groups Double blind Sweden
Salathia , 1985 n=416/384 follow-up: 1 year	Metoprolol 100 mg twice daily for one year (initial dose intravenously) versus placebo	patients with acute myocardial infarction	Parallel groups Double blind UK
Oxprenolol vs placebo			
EIS , 1984 n=858/883 follow-up: 1 year	Oxprenolol slow release 160 mg b.i.d. versus placebo	patients 35 to 69 years whohas survived acute myocardial infarction	Parallel groups Double blind Europe
Schwartz (high risk and low risk) , 1992 n=485/488 follow-up: 22 months (at least 6mo)	Oxprenolol 160mg daily versus placebo	patients surviving MI with or without complication by either ventricular tachycardia or fibrillation	Parallel groups Double blind Italy
Taylor , 1982 n=632/471 follow-up: 48 months	Oxprenolol 40mg twice daily versus placebo	Men 35 to 65 years old who had an acute myocardial infarction between 1 and 90 months reviously	Parallel groups Double blind UK
Pindolol vs placebo			
Australian and Swedish study , 1983 n=263/266 follow-up: 2 years	Pindolol 15 mg daily versus placebo	patients who had electrical and/or mechanical complications after an acute myocardial infarction	Parallel groups Double blind Sweden & Australia
Practolol vs placebo			
Multicentre international , 1975 n=1533/1520 follow-up: 12 months, up to 24 months	Practolol 200mg twice daily versus placebo	patients recovering from acute myocardial infarction	Parallel groups Double blind UK and overseas
Propranolol vs placebo			
Baber , 1980 n=355/365 follow-up: 9 months	Propranolol 40 mg three times a day versus placebo	Men and women with anterior MI	Parallel groups Double blind Europe
BHAT , 1982 [NCT00000492] n=1916/1921 follow-up: 25 months	Propranolol 180 or 240 mg/day versus placebo	mean and women who has experienced at least one MI	Parallel groups Double blind USA

continued...

Trial	Treatments	Patients	Trials design and methods
Hansteen , 1982 n=278/282 follow-up: 1 year	Propranolol 40mg four times a day versus placebo	high-risk patients who survived acute myocardial infarction	Parallel groups Double blind Norway
Propranolol or atenolol vs placebo			
Wilcox , 1980 n=259/129 follow-up: 1 year	Propranolol 40 mg three times daily(initial dose intravenously) n=132 or atenolol 50 mg twice daily n=127 versus placebo	patients with acute MI within the past 24 hours	Parallel groups Double blind UK
Sotalol vs placebo			
Julian , 1982 n=873/583 follow-up: 12 months	Sotalol 320mg once daily versus placebo	patients surviving an acute myocardial infarction	Parallel groups Double blind UK
Timolol vs placebo			
Norwegian Multicentre Study Group , 1981 n=945/939 follow-up: 17 months	Timolol 10mg twice daily versus placebo	patients surviving acute myocardial infarction	Parallel groups Double blind Norway

References

Aronow , 1997:

Aronow WS, Ahn C, Kronzon I Effect of propranolol versus no propranolol on total mortality plus nonfatal myocardial infarction in older patients with prior myocardial infarction, congestive heart failure, and left ventricular ejection fraction $\geq 40\%$ treated with diuretics plus angiotensin-converting enzyme inhibitors Am J Cardiol 1997;80:207-9 [9230162]

APSI, 1990:

Boissel JP, Leizorovicz A, Picolet H, Ducruet T Efficacy of acebutolol after acute myocardial infarction (the APSI trial). The APSI Investigators Am J Cardiol 1990;66:24C-31C [2220646]

Andersen , 1979:

Andersen MP, Bechgaard P, Frederiksen J, Hansen DA, Jurgensen HJ, Nielsen B, Pedersen F, Pedersen-Bjergaard O, Rasmussen SL Effect of alprenolol on mortality among patients with definite or suspected acute myocardial infarction. Preliminary results Lancet 1979;2:865-8 [90964]

Jurgensen JH, Frederiksen J, Hansen DA, Pedersen-Bjergaard O Limitation of myocardial infarct size in patients less than 66 years treated with alprenolol Br Heart J 1981;45:583-8 [7016150]

Wilhelmsson , 1974:

Wilhelmsson C, Vedin JA, Wilhelmssen L, Tibblin G, Werko L Reduction of sudden deaths after myocardial infarction by treatment with alprenolol. Preliminary results Lancet 1974;2:1157-60 [4139587]

Basu , 1997:

Basu S, Senior R, Raval U, van der Does R, Bruckner T, Lahiri A Beneficial effects of intravenous and oral carvedilol treatment in acute myocardial infarction. A placebo-controlled, randomized trial Circulation 1997;96:183-91 [9236433]

LIT Research Group , 1987:

The Lopressor Intervention Trial: multicentre study of metoprolol in survivors of acute myocardial infarction. Lopressor Intervention Trial Research Group Eur Heart J 1987;8:1056-64 [2890522]

Hjalmarson , 1981:

Hjalmarson A, Elmfeldt D, Herlitz J, Holmberg S, Malek I, Nyberg G, Ryden L, Swedberg K, Vedin A, Waagstein F, Waldenstrom A, Waldenstrom J, Wedel H, Wilhelmssen L, Wilhelmsson C Effect on mortality of metoprolol in acute myocardial infarction. A double-blind randomised trial *Lancet* 1981;2:823-7 [6116950]

Hjalmarson A, Herlitz J, Holmberg S, Ryden L, Swedberg K, Vedin A, Waagstein F, Waldenstrom A, Waldenstrom J, Wedel H, Wilhelmssen L, Wilhelmsson C The Goteborg metoprolol trial. Effects on mortality and morbidity in acute myocardial infarction *Circulation* 1983;67:126-32 [6342837]

Am J cardiol 1982; 49:1004 (abstract)

Herlitz J *Am J cardiol* 1984; 53:1D-50D

Ryden L, Ariniego R, Arnman K, Herlitz J, Hjalmarson A, Holmberg S, Reyes C, Smedgard P, Svedberg K, Vedin A, Waagstein F, Waldenstrom A, Wilhelmsson C, Wedel H, Yamamoto M A double-blind trial of metoprolol in acute myocardial infarction. Effects on ventricular tachyarrhythmias *N Engl J Med* 1983;308:614-8 [6828092]

Manger Cats , 1983:

Manger Cats V, van Capelle FJL, Lie KI, Durrer D. Effect of treatment with 2 100 mg metoprolol on mortality in a single-center study with low placebo mortality rate after infarction *Circulation* 1983;68(suppl 3):181.

Rehnqvist , 1983:

Rehnqvist N, Olsson G. Influence on ventricular arrhythmias by chronic post infarction treatment with metoprolol. *appl Circulation* 1983;68(suppl 3):69.

Olsson G, Rehnqvist N, Sjogren A, Erhardt L, Lundman T Long-term treatment with metoprolol after myocardial infarction: effect on 3 year mortality and morbidity *J Am Coll Cardiol* 1985;5:1428-37 [3889100]

Salathia , 1985:

Salathia KS, Barber JM, McIlmoyle EL, Nicholas J, Evans AE, Elwood JH, Cran G, Shanks RG, Boyle DM Very early intervention with metoprolol in suspected acute myocardial infarction *Eur Heart J* 1985;6:190-8 [3896811]

Boyle DM, Barber JM, McIlmoyle EL, Salathia KS, Evans AE, Cran G, Elwood JH, Shanks RG Effect of very early intervention with metoprolol on myocardial infarct size *Br Heart J* 1983;49:229-33 [6338889]

EIS , 1984:

European Infarction Study (E.I.S.). A secondary prevention study with slow release oxprenolol after myocardial infarction: morbidity and mortality *Eur Heart J* 1984;5:189-202 [6373264]

Bethge KP, Andresen D, Boissel JP, von Leitner ER, Peyrieux JC, Schroder R, Tietze U Effect of oxprenolol on ventricular arrhythmias: the European Infarction Study experience *J Am Coll Cardiol* 1985;6:963-72 [2413097]

Schwartz (high risk and low risk) , 1992:

Schwartz PJ, Motolese M, Pollavini G, Lotto A, Ruberti U, Trazzi R, et al. Prevention of sudden cardiac death after a first myocardial infarction by pharmacologic or surgical antiadrenergic interventions. *J Cardiovasc Electrophysiol* 1992;3:2-16.

Taylor , 1982:

Taylor SH, Silke B, Ebbutt A, Sutton GC, Prout BJ, Burley DM A long-term prevention study with oxprenolol in coronary heart disease *N Engl J Med* 1982;307:1293-301 [6752712]

Australian and Swedish study, 1983:

The effect of pindolol on the two years mortality after complicated myocardial infarction *Eur Heart J* 1983;4:367-75 [6617682]

Multicentre international , 1975:

Improvement in prognosis of myocardial infarction by long-term beta-adrenoreceptor blockade using practolol. A multicentre international study *Br Med J* 1975;3:735-40 [240481]

Baber , 1980:

Baber NS, Evans DW, Howitt G, Thomas M, Wilson T, Lewis JA, Dawes PM, Handler K, Tuson R Multicentre post-infarction trial of propranolol in 49 hospitals in the United Kingdom, Italy, and Yugoslavia *Br Heart J* 1980;44:96-100 [7000100]

BHAT , 1982:

A randomized trial of propranolol in patients with acute myocardial infarction. I. Mortality results *JAMA* 1982;247:1707-14 [7038157]

A randomized trial of propranolol in patients with acute myocardial infarction. II. Morbidity results *JAMA* 1983;250:2814-9 [6358542]

Lampert R, Ickovics JR, Viscoli CJ, Horwitz RI, Lee FA Effects of propranolol on recovery of heart rate variability following acute myocardial infarction and relation to outcome in the Beta-Blocker Heart Attack Trial Am J Cardiol 2003;91:137-42 [[12521623](#)]

Hansteen , 1982:

Hansteen V, Moinichen E, Lorentsen E, Andersen A, Strom O, Soiland K, Dyrbekk D, Refsum AM, Tromsdal A, Knudsen K, Eika C, Bakken J Jr, Smith P, Hoff PI One year's treatment with propranolol after myocardial infarction: preliminary report of Norwegian multicentre trial Br Med J (Clin Res Ed) 1982;284:155-60 [[6799077](#)]

Wilcox , 1980:

Wilcox RG, Roland JM, Banks DC, Hampton JR, Mitchell JR Randomised trial comparing propranolol with atenolol in immediate treatment of suspected myocardial infarction Br Med J 1980;280:885-8 [[6992916](#)]

Julian , 1982:

Julian DG, Prescott RJ, Jackson FS, Szekely P Controlled trial of sotalol for one year after myocardial infarction Lancet 1982;1:1142-7 [[6122937](#)]

Norwegian Multicentre Study Group , 1981:

Timolol-induced reduction in mortality and reinfarction in patients surviving acute myocardial infarction N Engl J Med 1981;304:801-7 [[7010157](#)]

Gundersen T Influence of heart size on mortality and reinfarction in patients treated with timolol after myocardial infarction Br Heart J 1983;50:135-9 [[6224500](#)]

Acta Med Scand 1983 674:1-129

2 About TrialResults-center.org

TrialResults-center is an innovative knowledge database that collects the results of RCTs and provides dynamic interactive systematic reviews and meta-analysis in the field of all major heart and vessels diseases.

The TrialResults-center database provides a unique view of the treatment efficacy based on all data provided directly from clinical trial results, offering a valuable alternative to personal bibliographic search, published meta-analysis, etc. Furthermore, it would allow comparing easily the various concurrent therapeutic for the same clinical condition.

Rigorous meta-analysis method is used to populate TrialResults-center: widespread search of published and non published trials, study selection using pre-specified criteria, data extraction using standard form.

TrialResults-center is continually updated on a weekly basis. We continually search all new results (whatever their publication channel) and these news results are immediately added to the database with a maximum of 1 week.

TrialResults-center is non-profit and self-funded.