Clinical trials of antiplatelets drug for cardiovascular prevention in secondary prevention

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1 clopidogrel

Trial	Treatments	Patients	Trials design and methods
clopidogrel vs aspirin			
CAPRIE , 1996 n=9599/9586 follow-up: mean 1.91 years	clopidogrel 75 mg once daily versus aspirin 325 mg once daily	patients with atherosclerotic vascular disease manifested as either recent ischaemic stroke, recent myocardial infarction, or symptomatic peripheral arterial disease	Parallel groups Double blind 16 countries
clopidogrel vs placebo (on top aspirin)			
CHARISMA , 2006 [NCT00050817] n=7802/7801 follow-up: median 28 months	clopidogrel (75 mg per day) plus low-dose aspirin (75 to 162 mg per day) versus placebo plus low-dose aspirin	patients with either clinically evident cardiovascular disease or multiple risk factors	Parallel groups Double blind 32 countries

References

CAPRIE, 1996:

A randomised, blinded, trial of clopidogrel versus aspirin in patients at risk of ischaemic events (CAPRIE). CAPRIE Steering Committee. Lancet 1996 Nov 16;348:1329-39 [8918275]

CHARISMA, 2006:

Bhatt DL, Fox KA, Hacke W, Berger PB, Black HR, Boden WE, Cacoub P, Cohen EA, Creager MA, Easton JD, Flather MD, Haffner SM, Hamm CW, Hankey GJ, Johnston SC, Mak KH, Mas JL, Montalescot G, Pearson TA, Steg PG, Steinhubl SR, Weber MA, Brennan DM, Fabry-Rib Clopidogrel and aspirin versus aspirin alone for the prevention of atherothrombotic events. N Engl J Med 2006;354:1706-17 [16531616] 10.1056/NEJMoa060989

2 P2Y12 receptor-antagonist

Trial	Treatments	Patients	Trials design and methods
ticagrelor vs placebo (on top aspirin)			
PEGASUS 90mg , 2015 [NCT01225562] n=7050/7067 follow-up: 2.75 y (median)	-	patients who had had a myocardial infarction 1 to 3 years earlier	double-blind
PEGASUS 60mg , 2015 [NCT01225562] n=7045/7067 follow-up: 2.75 y (median)	ticagrelor at a dose of 60 mg twice daily versus placebo	patients who had had a myocardial infarction 1 to 3 years earlier	Parallel groups double-blind

References

PEGASUS 90mg, 2015:

Bonaca MP, Bhatt DL, Braunwald E, Cohen M, Steg PG, Storey RF, Held P, Jensen EC, Sabatine MS Design and rationale for the Prevention of Cardiovascular Events in Patients With Prior Heart Attack Using Ticagrelor Compared to Placebo on a Background of Aspirin-Thrombolysis in Myocardial Infarction 54 (PEGASUS-TIMI 54) trial. Am Heart J 2014;167:437-444.e5 [24655690]

Bonaca MP, Bhatt DL, Cohen M, Steg PG, Storey RF, Jensen EC, Magnani G, Bansilal S, Fish MP, Im K, Bengtsson O, Ophuis TO, Budaj A, Theroux P, Ruda M, Hamm C, Goto S, Spinar J, Nicolau JC, Kiss RG, Murphy SA, Wiviott SD, Held P, Braunwald E, Sabatine MS Long-Term Use of Ticagrelor in Patients with Prior Myocardial Infarction. N Engl J Med 2015 Mar 14;: [25773268] 10.1056/NEJMoa1500857

PEGASUS 60mg, 2015:

Bonaca MP, Bhatt DL, Braunwald E, Cohen M, Steg PG, Storey RF, Held P, Jensen EC, Sabatine MS Design and rationale for the Prevention of Cardiovascular Events in Patients With Prior Heart Attack Using Ticagrelor Compared to Placebo on a Background of Aspirin-Thrombolysis in Myocardial Infarction 54 (PEGASUS-TIMI 54) trial. Am Heart J 2014;167:437-444.e5 [24655690]

Bonaca MP, Bhatt DL, Cohen M, Steg PG, Storey RF, Jensen EC, Magnani G, Bansilal S, Fish MP, Im K, Bengtsson O, Ophuis TO, Budaj A, Theroux P, Ruda M, Hamm C, Goto S, Spinar J, Nicolau JC, Kiss RG, Murphy SA, Wiviott SD, Held P, Braunwald E, Sabatine MS Long-Term Use of Ticagrelor in Patients with Prior Myocardial Infarction. N Engl J Med 2015 Mar 14;: [25773268] 10.1056/NEJMoa1500857

3 selective PAR-1 thrombin receptor antagonist

Trial	Treatments	Patients	Trials design and methods
vorapaxar vs placebo (on top aspirin)			
TRA-2P TIMI 50 , 2012 [NCT00526474] n=13225/13244 follow-up: 2.5 y (median)	vorapaxar (SCH 530348) 2.5-mg daily versus placebo (added to the existing standard of care for preventing heart attack and stroke (eg, aspirin, clopidogrel)	patients with a known history of atherosclerosis (MI, ischemic stroke, or peripheral vascular disease)	Parallel groups double-blind
TRA-2P TIMI 50 (no prior stroke sub group) , 2012 n=20699 follow-up: 2.5 y (median)	vorapaxar (SCH 530348) 2.5-mg daily versus placebo (added to the existing standard of care for preventing heart attack and stroke (eg, aspirin, clopidogrel)	patients with a known history of atherosclerosis (MI, ischemic stroke, or peripheral vascular disease), sub group of patient with no prior stroke	Parallel groups double-blind
TRA-2P TIMI 50 (MI subgroup) , 2012 [NCT00526474] n=8898/8881 follow-up: 2.5 y (median)	vorapaxar (SCH 530348) 2.5-mg daily versus placebo (added to the existing standard of care for preventing heart attack and stroke (eg, aspirin, clopidogrel)	prespecified subgroup of patients with a qualifying myocardial infarction among the overall population of patients with a known history of atherosclerosis (MI, ischemic stroke, or peripheral vascular disease)	Parallel groups double-blind multinational

References

TRA-2P TIMI 50, 2012:

Morrow DA, Scirica BM, Fox KA, Berman G, Strony J, Veltri E, Bonaca MP, Fish P, McCabe CH, Braunwald E Evaluation of a novel antiplatelet agent for secondary prevention

in patients with a history of atherosclerotic disease: design and rationale for the Thrombin-Receptor Antagonist in Secondary Prevention of Atherothrombotic Ischemic Events (TRA 2 degrees P)-TIMI 50 trial. Am Heart J 2009 Sep;158:335-341.e3 [19699854]

Morrow DA, Braunwald E, Bonaca MP, Ameriso SF, Dalby AJ, Fish MP, Fox KA, Lipka LJ, Liu X, Nicolau JC, Oude Ophuis AJ, Paolasso E, Scirica BM, Spinar J, Theroux P, Wiviott SD, Strony J, Murphy SA Vorapaxar in the Secondary Prevention of Atherothrombotic Events. N Engl J Med 2012 Mar 24;: [22443427] 10.1056/NEJMoa1200933

Scirica BM, Bonaca MP, Braunwald E, De Ferrari GM, Isaza D, Lewis BS, Mehrhof F, Merlini PA, Murphy SA, Sabatine MS, Tendera M, Van de Werf F, Wilcox R, Morrow DA Vorapaxar for secondary prevention of thrombotic events for patients with previous myocardial infarction: a prespecified subgroup analysis of the TRA 2P-TIMI 50 trial. Lancet 2012;380:1317-24 [22932716]

TRA-2P TIMI 50 (no prior stroke sub group), 2012:

Morrow DA, Braunwald E, Bonaca MP, Ameriso SF, Dalby AJ, Fish MP, Fox KA, Lipka LJ, Liu X, Nicolau JC, Oude Ophuis AJ, Paolasso E, Scirica BM, Spinar J, Theroux P, Wiviott SD, Strony J, Murphy SA Vorapaxar in the Secondary Prevention of Atherothrombotic Events. N Engl J Med 2012 Mar 24;: [22443427] 10.1056/NEJMoa1200933

TRA-2P TIMI 50 (MI subgroup), 2012:

Morrow DA, Braunwald E, Bonaca MP, Ameriso SF, Dalby AJ, Fish MP, Fox KA, Lipka LJ, Liu X, Nicolau JC, Oude Ophuis AJ, Paolasso E, Scirica BM, Spinar J, Theroux P, Wiviott SD, Strony J, Murphy SA Vorapaxar in the Secondary Prevention of Atherothrombotic Events. N Engl J Med 2012 Mar 24;: [22443427] 10.1056/NEJMoa1200933

Scirica BM, Bonaca MP, Braunwald E, De Ferrari GM, Isaza D, Lewis BS, Mehrhof F, Merlini PA, Murphy SA, Sabatine MS, Tendera M, Van de Werf F, Wilcox R, Morrow DA Vorapaxar for secondary prevention of thrombotic events for patients with previous myocardial infarction: a prespecified subgroup analysis of the TRA 2P-TIMI 50 trial. Lancet 2012 Aug 24;: [22932716] 10.1016/S0140-6736(12)61269-0

4 About TrialResults-center.org

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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.

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