

# Clinical trials of New P2Y12 Inhibitors for acute coronary syndrome in all type of patients

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## 1 P2Y12 receptor antagonist

Trial	Treatments	Patients	Trials design and methods
<b>elinogrel vs placebo</b>			
<b>ERASE-MI , 2009</b> n=34/36 follow-up: 30-37 days	elinogrel 10, 20, 40, or 60 mg as a single intravenous bolus versus placebo	STEMI patients	Parallel groups double blind
<b>ticagrelor vs clopidogrel</b>			
<b>PLATO , 2009</b> [NCT00391872] n=9333/9291 follow-up: 1 y	ticagrelor 90mg twice daily versus clopidogrel 75mg once daily	patients with an acute coronary syndrome, with or without ST-segment elevation (onset of symptoms within the previous 24h).	Parallel groups double blind 43 countries
<b>DISPERSE-2 (90mg) , 2007</b> n=334/327 follow-up: 12 weeks	ticagrelor 90 mg twice daily versus clopidogrel	patients with NSTEMI-ACS, treated with aspirin and standard therapy for ACS	Parallel groups double blind

## References

### ERASE-MI, 2009:

Berger JS, Roe MT, Gibson CM, Kilaru R, Green CL, Melton L, Blankenship JD, Metzger DC, Granger CB, Gretler DD, Grines CL, Huber K, Zeymer U, Buszman P, Harrington RA, Armstrong PW Safety and feasibility of adjunctive antiplatelet therapy with intravenous elinogrel, a direct-acting and reversible P2Y12 ADP-receptor antagonist, before primary percutaneous intervention in patients with ST-elevation myocardial infarction: the Early Rapid ReversAl of platelet thromboSis with intravenous Elinogrel before PCI to optimize reperfusion in acute Myocardial Infarction (ERASE MI) pilot trial. *Am Heart J* 2009;158:998-1004.e1 [[19958867](#)]

### PLATO, 2009:

James S, Akerblom A, Cannon CP, Emanuelsson H, Husted S, Katus H, Skene A, Steg PG, Storey RF, Harrington R, Becker R, Wallentin L Comparison of ticagrelor, the first reversible oral P2Y(12) receptor antagonist, with clopidogrel in patients with acute coronary syndromes: Rationale, design, and baseline characteristics of the PLATelet inhibition and patient Outcomes (PLATO) trial. *Am Heart J* 2009;157:599-605 [[19332184](#)]

Wallentin L, Becker RC, Budaj A, Cannon CP, Emanuelsson H, Held C, Horrow J, Husted S, James S, Katus H, Mahaffey KW, Scirica BM, Skene A, Steg PG, Storey RF, Harrington RA Ticagrelor versus Clopidogrel in Patients with Acute Coronary Syndromes. *N Engl J Med* 2009 Aug 30; [[19717846](#)] [10.1056/NEJMoa0904327](#)

Bellemain-Appaix A, Brieger D, Beygui F, Silvain J, Pena A, Cayla G, Barthlmy O, Collet JP, Montalescot G New P2Y12 Inhibitors Versus Clopidogrel in Percutaneous Coronary Intervention A Meta-Analysis. *J Am Coll Cardiol* 2010 Aug 18; [[20800407](#)] [10.1016/j.jacc.2010.07.012](#)

### DISPERSE-2 (90mg), 2007:

Cannon CP, Husted S, Harrington RA, Scirica BM, Emanuelsson H, Peters G, Storey RF Safety, tolerability, and initial efficacy of AZD6140, the first reversible oral adenosine diphosphate receptor antagonist, compared with clopidogrel, in patients with non-ST-segment elevation acute coronary syndrome: primary results of the DISPERSE-2 trial. *J Am Coll Cardiol* 2007;50:1844-51 [[17980250](#)]

Storey RF, Husted S, Harrington RA, Heptinstall S, Wilcox RG, Peters G, Wickens M, Emanuelsson H, Gurbel P, Grande P, Cannon CP Inhibition of platelet aggregation by AZD6140, a reversible oral P2Y12 receptor antagonist, compared with clopidogrel in patients with acute coronary syndromes. J Am Coll Cardiol 2007;50:1852-6 [17980251]

## 2 reversible ADP receptor antagonist

Trial	Treatments	Patients	Trials design and methods
<b>cangrelor up front vs clopidogrel up front</b>			
<b>CHAMPION-PCI , 2009</b> [NCT00305162] n=4367/4355 follow-up: 48 h	cangrelor up front (cangrelor administered before percutaneous coronary intervention and followed by clopidogrel) versus clopidogrel up front (clopidogrel followed by placebo)	high risk patients requiring PCI	Parallel groups double blind 14 countries
<b>cangrelor up front vs delayed clopidogrel</b>			
<b>CHAMPION-PLATFORM , 2009</b> [NCT00385138] n=2693/2669 follow-up: 48 h	cangrelor up front (cangrelor during PCI followed by 600 mg of clopidogrel) versus delayed clopidogrel (placebo during PCI followed by 600 mg of clopidogrel)	patients with acute coronary syndrome undergoing percutaneous coronary intervention	Parallel groups double blind 18 countries

2

## References

### CHAMPION-PCI, 2009:

Harrington RA, Stone GW, McNulty S, White HD, Lincoff AM, Gibson CM, Pollack CV Jr, Montalescot G, Mahaffey KW, Kleiman NS, Goodman SG, Amine M, Angiolillo DJ, Becker RC, Chew DP, French WJ, Leisch F, Parikh KH, Skerjanec S, Bhatt DL Platelet inhibition with cangrelor in patients undergoing PCI. N Engl J Med 2009 Dec 10;361:2318-29 [19915221]

### CHAMPION-PLATFORM, 2009:

Bhatt DL, Lincoff AM, Gibson CM, Stone GW, McNulty S, Montalescot G, Kleiman NS, Goodman SG, White HD, Mahaffey KW, Pollack CV Jr, Manoukian SV, Widimsky P, Chew DP, Cura F, Manukov I, Tousek F, Jafar MZ, Arneja J, Skerjanec S, Harrington RA Intravenous Platelet Blockade with Cangrelor during PCI. N Engl J Med 2009 Nov 15; [19915222]

## 3 thienopyridine

Trial	Treatments	Patients	Trials design and methods
<b>prasugrel vs clopidogrel</b>			
<b>JUMBO-TIMI 26 , 2005</b> n=650/254 follow-up: 30 days	Prasugrel 3 doses versus clopidogrel 300mg loading dose followed by 75 mg daily)	patients undergoing elective or urgent percutaneous coronary intervention	Parallel groups double blind

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Trial	Treatments	Patients	Trials design and methods
TRITON-TIMI 38 , 2007 [NCT00097591] n=6813/6795 follow-up:	prasugrel 60-mg loading dose and 10-mg daily maintenance dose, for 6 to 15 months versus clopidogrel (a 300-mg loading dose and a 75-mg daily maintenance dose) for 6 to 15 months	patients with moderate-to-high-risk acute coronary syndromes (UA, NSTEMI,STEMI) with scheduled percutaneous coronary intervention	Parallel groups double blind 30 countries

## References

### JUMBO-TIMI 26, 2005:

Wiviott SD, Antman EM, Winters KJ, Weerakkody G, Murphy SA, Behounek BD, Carney RJ, Lazzam C, McKay RG, McCabe CH, Braunwald E Randomized comparison of prasugrel (CS-747, LY640315), a novel thienopyridine P2Y12 antagonist, with clopidogrel in percutaneous coronary intervention: results of the Joint Utilization of Medications to Block Platelets Optimally (JUMBO)-TIMI 26 trial. *Circulation* 2005 Jun 28;111:3366-73 [[15967851](#)]

### TRITON-TIMI 38, 2007:

Antman EM, Wiviott SD, Murphy SA, Voitek J, Hasin Y, Widimsky P, Chandna H, Macias W, McCabe CH, Braunwald E Early and late benefits of prasugrel in patients with acute coronary syndromes undergoing percutaneous coronary intervention: a TRITON-TIMI 38 (TRial to Assess Improvement in Therapeutic Outcomes by Optimizing Platelet Inhibition with Prasugrel-Thrombolysis In Myocardial Infarction) analysis. *J Am Coll Cardiol* 2008 May 27;51:2028-33 [[18498956](#)]

Wiviott SD, Braunwald E, McCabe CH, Montalescot G, Ruzyllo W, Gottlieb S, Neumann FJ, Ardissino D, De Servi S, Murphy SA, Riesmeyer J, Weerakkody G, Gibson CM, Antman EM Prasugrel versus clopidogrel in patients with acute coronary syndromes. *N Engl J Med* 2007;357:2001-15 [[17982182](#)]

3

## 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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