

Author, date	Patient group	Study type	Outcomes	Key results	Study Weaknesses
Yusuf, 2002	12562 pt (CURE) with ACS, without ST \uparrow , present < 24h in hospital. Clopidogrel vs Placebo.	Placebo controlled RCT (PRCT)	% cardiovasc \uparrow , MI & strokes (= cardiovasc events) at 30 days and >30 days (3-9 months)	Clopidogrel significantly reduces risk of ischemic vascular events. (<30d: 5.4% vs 4.3%) (>30d: 6.3% vs 5.2%) Cardiovasc \uparrow wasn't sign decreased. Sign increase in major bleedings (>30d 1.18% vs 1.75% RR 1.48), but not in life-threatening bleedings.	<i>Funded by the Pharmaceutical Companies.</i> Retrospective Other treatments (like heparin / revasc. etc) differs and can be an important co-founder.
Yusuf, 2001	12562 pt (CURE) with ACS, without ST \uparrow , present <24h in hospital. Aspirin with or without Clopidogrel .	PRCT	% cardiovasc \uparrow , MI & strokes (3-9 months)	Clopidogrel has beneficial effects for ischemic vasc events. (9.3% vs 11.45 RR 0.80) Major bleeding sign increased (3.7% vs 2.7% RR 1.38), no sign increase in life-threatening bleedings.	* Same patients as previous study!!!
Ho, 2008	3137 pt with ACS, treated with clopidogrel after discharge & with no event during clopidogrel treatment.	Retrospective Cohort study	% \uparrow or MI (mean follow-up was 196 days).	After stopping of clopidogrel 17.1% developed MI or \uparrow . Most (60.8%) events were in the first 90 days after stopping!	Retrospective Predominantly male veterans No data on cause-specific mortality & reasons for stopping clopidogrel <i>This study gives no information on the initial efficiency of clopidogrel in ACS!</i>
Mehta, 2010	17263 pt (CURRENT-OASIS 7) with ACS and early PCI. Double-dose vs standard-dose clopidogrel & high- vs low-dose aspirin.	Randomized Factorial Trial	% Cardiovasc \uparrow , MI & stroke at 30 days.	Double-dose clopidogrel (600mg \rightarrow 150mg \rightarrow after 1 week 75 mg) reduced the rate of the primary outcome significantly (3.9% vs 4.5% CI 0.74-0.99) & definite stent thrombosis (0.7 vs 1.3%)/ Major bleeding was more common (1.6 vs 1.1%), no more fatal bleeding.	<i>Funded by the Pharmaceutical Companies!</i> Aspirin dose was open-label Outcome only for first 30 days <i>This study gives no information on the initial efficiency of clopidogrel in ACS!</i>
Gurbel, 2009	123 pt with stable coronary artery disease and taking aspirin. Ticagrelor vs. high-dose clopidogrel vs placebo.	Randomized Double-blinded study	Platelet function (after 0.5, 1, 2, 4, 8, 24h & 6 weeks / 24h, 3, 5, 7 days after stopping)	Ticagrelor has a faster on- and offset effect on platelet inhibition than clopidogrel.	<i>Funded by the Pharmaceutical Companies!</i> No ACS-pt. No clinical outcome.
Cannon, 2010	13408 pt (PLATO) with ACS who were planned to undergo invasive strategy (CAG/PCI/CABG). Ticagrelor vs. Clopidogrel	Prospective, Double-blind, Double-dummy Study (PDDS)	% Cardiovasc \uparrow , MI or stroke (max follow-up 360d)	Ticagrelor had sign fewer ischemic vasc events (9.0% vs 10.7%). No difference in major bleeding.	<i>Funded by Pharmaceutical Companies!</i> Only half had max follow-up
Wiviott, 2007	13608 pt (TRITON-TIMI) with moderate-high risk ACS scheduled for PCI. Prasugrel vs. Clopidogrel	RCT	% Cardiovasc \uparrow , MI or stroke (median follow-up: 14.5 months)	Overall mortality no sign difference. Prasugrel (due to bleeding) no benefit in: previous stroke/TIA, >75y or <60kg. (with previous stroke/TIA worse outcome!) Without these RF sign less \uparrow (10.2 vs 12.2%)	<i>Funded by Pharmaceutical Companies!</i> Low-dose clopidogrel used. Lots of results (in non-stroke pt) were from post hoc subgroup analyses.
Wallentin, 2009	18624 pt (PLATO) with ACS. Ticagrelor vs. Clopidogrel	PDDS	% Cardiovasc \uparrow , MI or stroke (follow-up: 12	Ticagrelor had sign fewer ischemic vasc events (9.9% vs 11.7%). Rate of death from any cause was also reduced (4.5% vs 5.9%)	<i>Funded by Pharmaceutical Companies!</i> Lots of post hoc subgroup analyses

			months)	More major bleeding not treated to CABG were seen (4.5 vs 3.8%)	
Montalescot, 2009	3534 pt (TRITON-TIMI38) with STEMI undergoing PCI. Prasugrel vs Clopidogrel	Double-blind RCT	% Cardiovasc †, MI or stroke (follow-up: 15 months)	Prasugrel had fewer ischemic vasc events (after 30 days and) 15 months 10.0% vs 12.4% Only sign more major bleeding in prasugrel group after CABG (2.7% vs 18.8%)	<i>Funded by Pharmaceutical Companies!</i> Clopidogrel was not given in double-dose.
Steg, 2010	7544 pt (PLATO) with ACS w/ ST↑ or LBTB, planned for PCI. Ticagrelor vs Clopidogrel.	Double-blind RCT	% Cardiovasc †, MI or stroke (follow-up: 12 months)	Ticagrelor had a non sign decrease in ischemic vasc events (10.8% vs. 9.4%) CV†/MI sign lower & stroke higher with ticagrelor. Stent thrombosis was sign lower (1.6% vs 2.4%)	<i>Funded by Pharmaceutical Companies!</i> Not all pt underwent PCI Lots of post-hoc analysis
Koul, 2011	13847 pt (SCAAR) with STEMI who underwent for PCI. Clopidogrel upstream.	Retrospective Cohort Study	% Cardiovasc † or MI (follow-up: 12 months)	After adjustment clopidogrel has sign lower primary outcome (HR: 0.82). Only 1y † was sign reduced by itself (HR 0.76) No sign bleeding difference. (<60kg no benefit)	Retrospective Heterogeneously in other treatments ↑use of clopidogrel coincided with ↑ use of PCI (→ better outcome could be because of better PCI)
Dörler, 2011	5955 pt with STEMI going for acute PCI. Clopidogrel pretreatment vs. after PCI.	Prospective Cohort Study	% In-hospital †	On multivariable analysis clopidogrel pretreatment sign reduced in-hospital mortality (OR=0.6), especially in pt with GPIIb/IIIa antagonist in cad-lab (OER=0.4)	Inbalance in baseline characteristics. No specific loading dose. Exact timing of dose unknown.
Wiviott, 2007	201 pt (PRINCIPAL-TIMI 44) scheduled for CAG with planned PCI. Prasugrel vs. high dose Clopidogrel.	Randomized, Double-blind, 2-phase cross-over study	Platelet function (IPA) at 6h and during maintenance-dose phase after 14 / 29 days	IPA with Prasugrel was consistently higher than clopidogrel (sign difference emerged after 30 min), both after loading dose (6h: 74.8% vs 31.8%) as during maintenance.	<i>Funded by Pharmaceutical Companies!</i> Only little more than half went on to go for PCI. No clinical outcome.
Aradi, 2013	107473 pt (COMMIT, PLATO, TRITON TRILOGY) clopidogrel vs placebo (64027pt) & clopidogrel vs ticagrelor/prasugrel (43446pt)	Review	% Cardiovasc †, MI or stroke	Clopidogrel reduces risk for cardiovasc † (OR 0.93) MI (OR 0.8) and stroke (OR 0.84) significantly, without influencing ICH. Prasugrel/Ticagrelor provides additional benefit over clopidogrel regarding cardiovasc † (OR 0.86), MI (OR 0.83) without advantage in stroke or ICH.	<i>Sponsored by the Pharmaceutical Companies!</i> Different patient groups in studies reviewed. In clopidogrel vs placebo rate of PCI was very low. Prasugrel & Ticagrelor were taken in 1 group.