

AMI onset to revascularization 3.95 hours; primary failure 0.7%. The primary clinical endpoint data appear in the table. Multivariate analysis showed abciximab as independently related to 1-month outcome (HR 0.41; 95% CI 0.17-0.97,  $p=0.041$ ).

	Abciximab n=200	Stent Alone n=200	p value
Death	7 (3.5%)	8 (4%)	0.792
Reinfarction	1 (0.5%)	9 (4.5%)	0.010
TVR	1 (0.5%)	3 (1.5%)	0.315
Stroke	0	1 (0.5%)	0.317
MACCE	9 (4.5%)	21 (10.5%)	0.023

12:36 p.m.

#### 1025MP-166 Improved Clinical Outcomes With Abciximab Therapy in Acute Myocardial Infarction: A Systematic Overview of Randomized Clinical Trials

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**Background-** Investigations examining glycoprotein (GP) IIb/IIIa inhibition in primary percutaneous coronary intervention (PCI) have suggested the efficacy of abciximab in improving early clinical and angiographic outcomes, yet sample size limitations and variability in trial design precluded the results from any individual study from being definitive.

**Methods-** We identified 4 randomized trials of primary PCI for acute ST-elevation myocardial infarction (MI) (ADMIRAL, CADILLAC, ISAR-2, RAPPORT) with the following characteristics: comparison of GP IIb/IIIa antagonists with placebo or control therapy; enrollment of  $\geq 200$  pts; and description of a 30-day clinical endpoint that included the variables of death (D), repeat MI (reMI), and urgent target vessel revascularization (TVR). The primary efficacy endpoint was a composite of D, reMI, or ischemia-driven TVR at 30 days.

**Results-** Among 3,266 pts with MI, there were no significant differences between patients randomized to abciximab (n=1643) or those assigned to placebo or control (n=1623). Thirty day clinical events are summarized.

30-day Clinical Outcome	Odds Ratio (95% CI)
Death	0.73 (0.46, 1.16)
ReMI	0.72 (0.39, 1.34)
Ischemia-driven TVR	0.46 (0.30, 0.70)
Death or reMI	0.72 (0.49, 1.05)
Death, reMI, or ischemia-driven TVR	0.54 (0.40, 0.72)

**Conclusions-** In this first systematic overview of clinical trials evaluating early outcomes with GP IIb/IIIa inhibition in primary PCI, abciximab was associated with significant reductions in the 30-day composite endpoint of D, reMI, and ischemic TVR and a trend toward reductions in 30-day D or reMI. These findings strongly encourage the use of intravenous GP IIb/IIIa inhibition as adjunctive therapy in primary PCI.

12:48 p.m.

#### 1025MP-167 Effect of Abciximab on Myocardial Microcirculation After Successful Primary Percutaneous Coronary Intervention for Acute ST-Segment Elevation Myocardial Infarction

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**Background:** Reports on the beneficial role of adjunctive therapy with GPIIb/IIIa inhibitors in pts. treated successfully with primary percutaneous coronary intervention (PCI) for acute ST-segment elevation myocardial infarction (STEMI) are inconsistent. We sought to determine whether and in which subgroups of these pts abciximab improves microvascular perfusion.

**Methods:** We included 145 pts with acute STEMI in whom epicardial perfusion (TIMI grade 3 flow, residual stenosis  $<30\%$ ) was restored successfully with primary PCI. 57/145 pts (39%) received the GPIIb/IIIa inhibitor abciximab. Serum concentrations of cardiac troponin T (cTnT) were measured just prior to reperfusion (T0) and 60 minutes thereafter (T60). The T60/T0 ratio was used to estimate tissue-level perfusion, a high T60/T0 ratio suggesting a good microvascular perfusion. On basis of T0/T60 ratio, pts were divided into quartiles with median T60/T0 ratios of 2.03, 6.86, 24.61 and 134.5 respectively. The percentage of pts within the three upper quartiles was compared between the two treatment groups. Analysis was done for the entire study population and for prespecified subgroups according to age (cut-off 70 yrs.), gender, cTnT status on admission (cut-off 0.1  $\mu\text{g/L}$ ), time from symptom onset to admission (cut-off 6 hrs), and diabetes mellitus.

**Results:** Both treatment groups compared favourably with respect to baseline clinical characteristics. The percentage of pts who obtained T60/T0 ratios within the three upper quartiles was significantly higher after administration of abciximab suggesting improved

microvascular perfusion (88% vs. 69%,  $p=0.05$ ). Among the prespecified subgroups abciximab significantly improved microcirculation in pts with an admission cTnT  $>0.1 \mu\text{g/L}$  ( $p=0.04$ ), in males ( $p=0.02$ ) and in pts  $>70$  yrs of age ( $p=0.01$ ). No beneficial effect could be seen in women, in pts with an admission cTnT  $<0.01 \mu\text{g/L}$  and in pts  $<70$  yrs of age. **Conclusions:** Abciximab improves microvascular perfusion in STEMI after successful re-establishment of epicardial flow by primary PCI. The treatment benefit seems to be especially pronounced in particular subgroups.

1:00 p.m.

#### 1025MP-168 Reduction of Hospital Mortality in Patients With ST Elevation Myocardial Infarction Receiving Glycoprotein IIb/IIIa Antagonists: Results of the ACOS Registry

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**Background:** The beneficial effect of IIb/IIIa-receptor antagonists (IIb/IIIa) has been proven in randomised trials on acute coronary syndromes (ACS). Little data exist on the frequency of IIb/IIIa use and its influence on outcome of patients with acute ST-elevation myocardial infarction (STEMI) in clinical practice.

**Methods:** Since June 2000 consecutive patients (pts) with ACS have been enrolled into the ACOS-Registry (Acute Coronary Syndrome, 154 hospitals) in Germany. We analysed the prospective data of STEMI-pts with and without treatment with IIb/IIIa to identify the impact of this treatment on hospital outcome.

**Results:** Out of 12,811 consecutive pts with ACS, 5,971 (47%) presented with STEMI, 2,259 of these pts (37%) were treated with IIb/IIIa. Determinants for the use of IIb/IIIa in STEMI were prehospital delay  $<4$  hours (OR 1.24, 1.05-1.46) and the performance of primary PCI (OR 4.08, 3.12-5.34). Prior STEMI or concomitant diseases, especially diabetes did not influence the decision. STEMI pts treated with IIb/IIIa were younger and already had received prior PCI more often than pts who were not treated with IIb/IIIa. After adjusting for differences in baseline characteristics and acute reperfusion therapy, the use of IIb/IIIa in STEMI pts was associated with a 24% reduction of hospital mortality (OR 0.76, 0.62-0.94).

**Conclusion:** The use of IIb/IIIa in acute STEMI was associated with an additional 24% reduction of hospital mortality independent of acute reperfusion therapy.

	STEMI with IIb/IIIa	STEMI without IIb/IIIa	p
Age (years)	63	66	$<0.01$
Prior PCI	8,2 %	5,3 %	$<0.01$
Hypercholesterolemia	48,1 %	42,6 %	$<0.01$
Diabetes	21,8 %	26,9 %	$<0.01$
PCI	60,0 %	22,9 %	$<0.01$
Stent (relative to PCI)	81,8 %	74,6 %	$<0.01$
Hospital mortality	6,2 %	11,2 %	$<0.01$

1:12 p.m.

#### 1025MP-169 Outcomes in Patients Requiring Bail-Out Abciximab During Primary Intervention in Acute Myocardial Infarction: Analysis From the CADILLAC Trial

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**Background:** As an adjunct to PCI, glycoprotein IIb/IIIa receptor inhibitors may either be used prophylactically in all patients or selectively in a bail-out fashion if procedural complications occur after PCI. The fate of patients requiring bail-out IIb/IIIa inhibitors during primary PCI for AMI is unknown.

**Methods:** In the CADILLAC Trial 2,082 patients of any age with AMI within 12 hours of symptom onset were randomized to undergo PTCA alone, PTCA plus abciximab (abx), stenting alone or stenting plus abx. Patients assigned to "no abx" were permitted to cross-over and receive abx for persistent thrombus, dissection, distal emboli or suboptimal epicardial blood flow refractory to intra-arterial calcium blockers.

**Results:** Of 1,030 patients assigned to no abx, 62 (6.0%) crossed over and were administered abx. 30 day outcomes appear in the Table.

**Conclusion:** Patients not administered up-front IIb/IIIa inhibitors in whom abx is required for procedural complications or a suboptimal result have markedly worse procedural results, more bleeding and greater rates of major adverse cardiac events than patients routinely treated with abx upfront. These data suggest that the proper way to use abx is prophylactically, and conversely question the utility of abx in a bail-out application during AMI intervention.