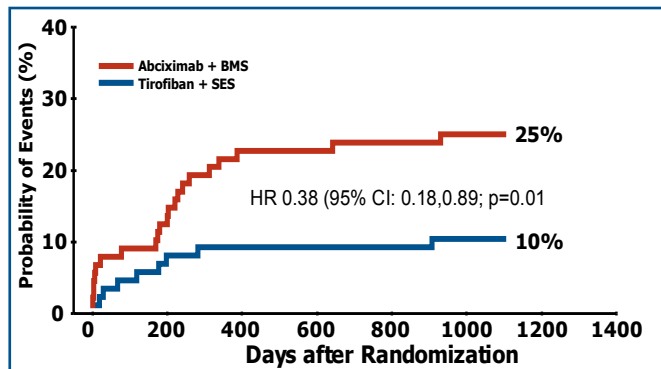


This difference was driven by an improvement in angiographic outcome leading to a significant reduction in the need for TVR in the tirofiban+SES group (p=0.01) (Figure 2).

**Figure 2. TVR at 3 Years.**



The cumulative incidence of major adverse cardiac events (death, MI or TVR) was lower in the tirofiban+SES group (28.7%) vs abciximab+BMS (40.9%) although the difference was not significant. All-cause mortality (16.0% vs 14.7%, p=0.85 and the composite of death/MI (19.5% vs 22.7%, p=0.57) were similar between the two treatment groups (tirofiban+SES and abciximab+BMS, respectively). There was no difference in the cumulative incidence of stent thrombosis (5.7% in the tirofiban+SES and 6.8% in the abciximab+BMS group, p=0.76).

“The results are reassuring given that the original results have not changed much over time,” said Dr. Valgimigli. “Yet, we should not forget the number of patients in this study was very low.” Further large scale trials are necessary to establish the role of this proposed strategy and to evaluate whether the observed differences in this study were related to the type of stent utilized or the selected GP IIb/IIIa antagonist. Future studies should also include data on the duration of dual antiplatelet treatment and the immediate consequences of its termination

## Enoxaparin Continues to Show Clinical Benefit Vs Unfractionated Heparin for STEMI

One-year results of the ExTRACT-TIMI 25 trial presented by David A. Morrow, MD, Brigham and Women’s Hospital, Boston, Massachusetts, continued to show significant benefits in favor of adjunctive treatment with enoxaparin

vs unfractionated heparin in reducing the rate of death or nonfatal myocardial infarction (MI) in 20,479 patients with ST-elevation myocardial infarction (MI) (STEMI) treated with fibrinolysis.

The primary efficacy endpoint was the composite of death or nonfatal recurrent MI. The main secondary endpoint was the composite of death, nonfatal reinfarction, or recurrent myocardial ischemia leading to urgent revascularization. An additional secondary endpoint was the composite of death, nonfatal reinfarction, or nonfatal disabling stroke.

In the main study, treatment with enoxaparin for the duration of the index hospitalization was superior to the current strategy of infusing unfractionated heparin for 48 hours as adjunctive antithrombin therapy to fibrinolysis, reducing death or nonfatal MI by 17% (p<0.0001) at 30 days [Antman EM et al. *New Engl J Med* 2006].

At one year of follow-up, based on data from 99% of the original intent-to-treat population (enoxaparin n=10,153; unfractionated heparin n=10,122), treatment with enoxaparin continued to show significant reductions in death or nonfatal MI and for nonfatal MI alone compared to unfractionated heparin (Table 1). A significant benefit in favor of enoxaparin treatment was also seen for the secondary endpoint of death, MI, or disabling stroke. No statistical differences were seen for other study endpoints.

**Table 1. Results at One Year.\***

Endpoint	Unfractionated Heparin		HR	95 CI	P value
	Enoxaparin (%)	Heparin (%)			
Death/MI	15.8	17.0	0.92	0.86 - 0.98	< 0.01
MI (nonfatal)	5.7	6.7	0.82	0.73 - 0.92	<0.001
Disabling Stroke	1.1	1.2	0.97	0.75 - 1.26	0.81
Death/MI/Nonfatal Disabling Stroke	16.0	17.3	0.91	0.85 - 0.98	0.007
Death	10.5	10.6	0.98	0.90 - 1.07	0.72

\*Kaplan-Meier

The benefit in favor of enoxaparin was also evident when data were analyzed across major prespecified subgroups.

The one-year benefit of the enoxaparin strategy is accomplished through a reduction in the rate of nonfatal MI. Although through 30 days the rate of major bleeding was significantly higher with enoxaparin, net clinical benefit was significantly in favor of enoxaparin both early (30 days) and late (one year) after treatment (p<0.001).