59. Prolonging Dual Antiplatelet Therapy Benefits Long-Term Prognosis of Elderly Patients With Coronary Heart Disease Complicated With Diabetes Mellitus Undergoing Drug-Eluting Stent

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Background: Patients with Coronary Heart Disease (CHD) complicated with Diabetes Mellitus (DM) have high risk of ischemia events. Furthermore, there is a higher risk of ischemia and bleeding events in elderly patients. Therefore, the compatible DAPT duration after DES is not clear for these patients.

Methods: 10724 consecutive patients underwent PCI from January to December 2013 were enrolled. 1562 patients accorded with the diagnostic criteria of DM, ≥65 years old, underwent DES implantation, and had no adverse events within 1 year after operation. Patients were divided into three groups according to DAPT duration: Standard DAPT (11 ≤ DAPT ≤ 13 months) and prolonging DAPT (13 < DAPT ≤ 24 months; DAPT > 24 months). The baseline data and 5-year long-term prognoses were collected.

Results: The standard DAPT and the prolonging DAPT duration accounted for 29.9% and 70.1% respectively. There are no significant differences among the three groups of baseline data. The results of 5-year follow-up showed that the incidence of all-cause death in the two prolonging DAPT groups wre significantly lower than standard DAPT (13 < DAPT ≤ 24 months vs. DAPT > 24 months vs. 11 ≤ DAPT ≤ 13 months: 4.8% vs. 4.1% vs. 8.6%, p = 0.007). 13 < DAPT ≤ 24 months group had the lowest incidence of MACCE and myocardial infarction (MACCE: 12.3% vs. 20.2% vs. 19.3%, p < 0.001; myocardial infarction: 1.9% vs. 2.9% vs. 5.1%, p = 0.008). There was no difference in the incidence of bleeding events among the three groups. Prolonging DAPT to 13-24 months was protective factor of MACCE (HR: 0.601, 95% CI: 0.446-0.811, p = 0.001), all-cause death (HR: 0.568, 95% CI: 0.357-0.903, p = 0.017) and myocardial infarction (HR: 0.353, 95% CI: 0.179-0.695, p = 0.003) compared with standard DAPT. There was no correlation between prolonged DAPT and bleeding events.

Conclusion: for elderly patients with CHD complicated with DM underwent DES implantation, appropriately prolonging of the DAPT duration could reduce the risk of cardiovascular adverse events. DAPT between13-24 months may get the most benefits. Prolonging DAPT duration does not increase the risk of bleeding.

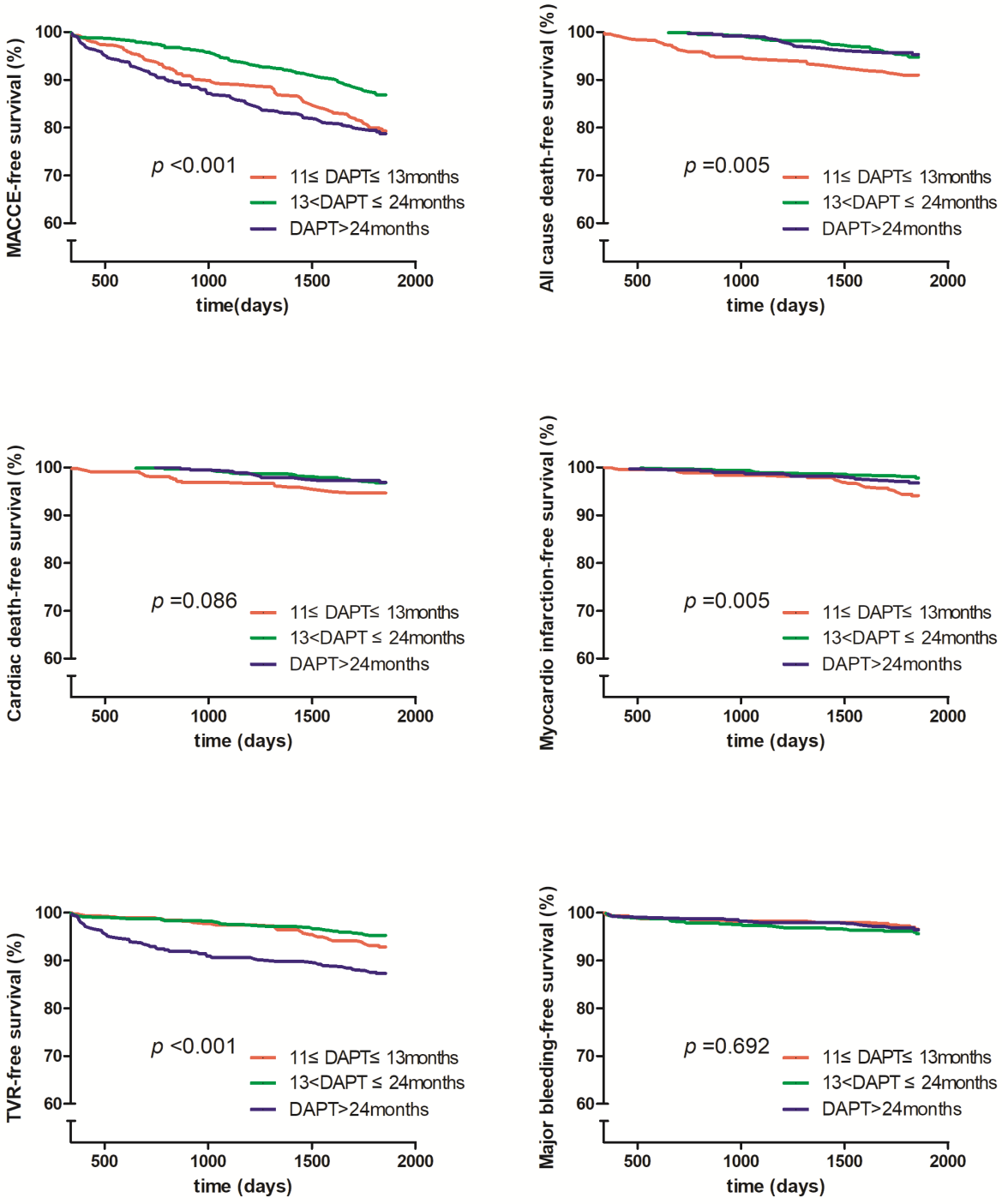
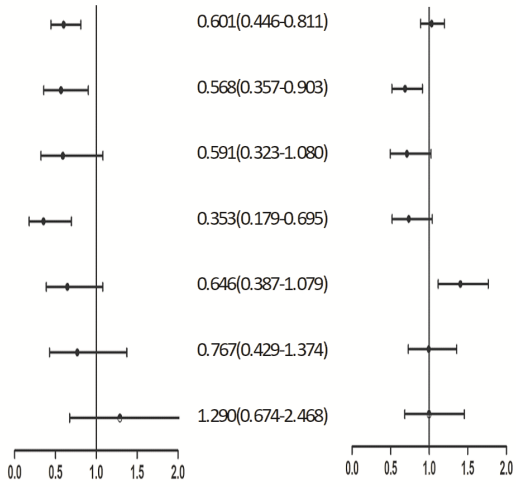


Figure 1 Kaplan-Meier survival analysis of different DAPT duration

Table 1 The effect of prolonging DAPT for clinical prognosis

	Standard DAPT	Prolonging DAPT	
	11-13 mos. n=467	13-24 mos. n=684	>24 mos. n=411
		HR (95% CI)	HR (95% CI)
MACCE	Ref	0.601(0.446-0.811)	1.031(0.888-1.197)
All cause death	Ref	0.568(0.357-0.903)	0.687(0.516-0.913)
Cardiac death	Ref	0.591(0.323-1.080)	0.711(0.495-1.022)
Myocardial infarction	Ref	0.353(0.179-0.695)	0.734(0.519-1.039)
TVR	Ref	0.646(0.387-1.079)	1.404(1.116-1.765)
Stroke	Ref	0.767(0.429-1.374)	0.993(0.728-1.355)
Bleeding≥BARC 2	Ref	1.290(0.674-2.468)	0.997(0.683-1.455)



Clinical Implications: Our study provides a very meaningful reference of the DAPT duration for a special kind of patients (Elderly Patients with Coronary Heart Disease complicated with Diabetes Mellitus undergoing Drug-eluting Stent).