

Take-Home Message

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Potential conflicts of interest

Speaker's name: TAN HUAY CHEEM

X I have the following potential conflicts of interest to report:

- Research contracts (EuroCor)
- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)

I do not have any potential conflict of interest

Advantages of Drug-Eluting Balloon

- Allow homogeneous drug transfer to the vessel wall and not only to the areas directly covered by the stent struts
- Drug concentrations at vessel wall highest at the time of injury when neointimal process is most vigorous. Afterwards, absence of drug aids in reendothelialisation and limit risk of late stent thrombosis
- Absence of polymer could decrease the stimulus of chronic inflammation and trigger for late thrombosis
- Absence of stent allows for preservation of original coronary anatomy, notably in cases of bifurcation or small vessels, leaving no scaffold
- Reduce duration of antiplatelet therapy
- Local drug delivery could be applied in situations where stents are not used or undesirable, eg small vessels, in-stent restenosis, or side branch in bifurcation lesions

Take Home Messages

- Better understanding of the coating technology of DIOR™ (Shellac coating) with established vascular biocompatibility
- Compelling evidence of DIOR™ DEB in the treatment of in-stent restenosis (VALENTINES, Asian studies).

ESC Class IIa indication for prior BMS ISR, Level of Evidence B
(ESC Guidelines for Myocardial Revascularisation, EHJ 2010)

Singapore NUH Study (n=53) and Valentines (n=250, 43 Asians)

Characteristics (n=303)	Asians (n=96)	Non-Asians (n=207)
Male Gender	79 (82.3%)	158 (76.3%)
Age (mean, yrs)	58.5	62.7
Previous MI	37 (38.5%)	105 (50.7%)
Diabetes	45 (46.9%)	60 (29.0%)
Hypertension	58 (60.4%)	180 (86.9%)
Hyperlipidemia	58 (60.4%)	142 (68.6%)
Smoking	29 (30.2%)	54 (26.1%)
Renal impairment	1 (1.0%)	17 (8.2%)
In-stent restenosis		
Following bare-metal stent	55 (57.3%)	136 (65.7%)
Following drug-eluting stent	41 (42.7%)	62 (30.0%)

Pooled Data of ISR Pts (By Ethnicity) With DIOR™ Treatment, n=303

	Asians (n=96)	Non-Asians (n=207)
Duration of follow-up	6.5 months	7.4 months
MACE	7 (7.3%)	25 (12.1%)
Cardiac death	0 (0.0%)	3 (1.5%)
Myocardial infarction	4 (4.2%)	5 (2.4%)
Target-lesion revascularization	2 (2.1%)	17 (8.2%)
TVR (including TLR)	6 (6.3%)	21 (10.1%)
Stent thrombosis	0 (0.0%)	2 (1.0%)
Non-cardiac death	0 (0.0%)	1 (0.5%)

Take Home Messages

- Early evidence of feasibility, efficacy and safety in AMI, bifurcation, small vessel lesions
- Extension of efficacy of DEB to peripheral domain in treating peripheral vascular disease, possibly arteriovenous dialysis fistula stenosis
- Looking forward: MAGICAL stent for treatment of de novo stenosis
- More randomised studies and registry results are underway to further establish the role of DEB in contemporary PCI practice, notably ASIAN-DIOR registry study

Thank You

