

DCB-based PCI in Mul- ti-Vessel- Disease

Study summaries SeQuent® Please / NEO
Not randomized controlled trials &
observational studies

DCB-based PCI in Multi-Vessel-Disease

Clinical impact of drug coated balloon-based percutaneous coronary intervention in patients with multivessel coronary artery disease

Significantly lower MACE rate in patients treated with SeQuent® Please (NEO) compared to DES

Shin ES et al. JACC Cardiovasc Interv. 2023;16(3):292-299

Overview

Observational registry:

- DCB (study device = SeQuent Please® (NEO)) in patients with MVD (2 or more coronary lesions)
- Propensity score matched to patients receiving DES

Primary endpoint:

- MACE @24 months (cardiac death, MI, TVR, stroke, stent thrombosis and major bleeding)

Results

- In DCB-group 34.3 % of patients were treated with DCB-only, 65.7 % with hybrid PCI (DES+DCB)
- Stent-length was significantly reduced by 63.7 % in DCB-group
- MACE after 24 months was significantly lower in DCB-group vs. DES (3.9 % vs. 11 %; p=0.002)

Total population: 508 patients	DCB-Based (n=254)	DES-only (n=254)	p-value
Clinical endpoint after 24 months			
MACE	3.9 % (10)	11.0 % (28)	0.002
Cardiac death	0.4 % (1)	2.4 % (6)	0.047
MI	0	1.2 % (3)	0.082
Stroke	0	0.4 % (1)	0.313
ST (definite/probable)	0	0.4 % (1)	0.333
TVR	3.1 % (8)	6.3 % (16)	0.095
Major bleeding	0.4 % (1)	2.8 % (7)	0.027

Conclusion

The **DCB-based treatment** approach showed a **significantly reduced stent burden in multivessel PCI** and this **led to a significantly lower rate of MACE** than the DES-only treatment.