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 i2 SUMMIT

IMPACT OF TOTAL SIROLIMUS-ELUTING STENT LENGTH ON THREE-YEAR CLINICAL OUTCOMES IN THE J-CYPHER REGISTRY

i2 Poster Contributions

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Session Title: DES II, Restenosis, Left Main and Outcomes

Abstract Category: PCI - DES

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Background: Sirolimus-eluting stent (SES) compared to bare-metal stent use for long lesion treatment is associated with reduced restenosis rates. The objects of this study was to investigate the relationships between total stent length (TSL) and long-term clinical outcomes after SES implantation.

Methods: Three-year follow-up data were available for 10,773 patients (14,651 lesions) that had been treated with only SES in the j-Cypher registry. Patients and lesions were divided into quartile groups: TSL per patient (Q1: 8-18 mm, Q2: 19-28 mm, Q3: 28-51 mm, Q4: 52-293 mm), and TSL per lesion (QA: 8-18 mm, QB: 19-23 mm, QC: 23-33 mm, QD: 33-150 mm).

Results: In per lesion data, longer TSL increased target-lesion revascularization (TLR) rates but did not increased stent thrombosis rates ($p=0.2324$). In per patient data, the incidences of TLR remarkably increased with increasing TSL. Incidence of composite of death and myocardial infarction also increased with increasing TSL, however, after adjustment for baseline differences, there was no statistically significance. Definite ST rate in group Q4 was significantly higher than in other groups, both unadjusted (Hazard ratio [HR] 1.770, $p=0.0081$) and adjusted (HR 1.727, $p=0.0122$) for baseline differences.

Conclusions: TSL per lesion and patient had significantly impacts on TLR rates. Longer TSL per patient was associated with increased incidence of stent thrombosis through 3years.

Unadjusted and Adjusted hazard Ratios for Clinical Events in Group Q4 as Compared With Group Q1, Q2 and Q3.

A: Unadjusted hazard ratios of clinical event rates

	Hazard ratio	95% C.I	p value
Target lesion revascularization	2.343	2.070-2.651	<0.0001
Definite stent thrombosis	1.770	1.160-2.702	0.0081
Death / myocardial infarction	1.217	1.049-1.413	0.0096

B: Adjusted hazard ratios of clinical event rates

	Hazard ratio	95% C.I	p value
Target lesion revascularization	2.355	2.079-2.668	<0.0001
Definite stent thrombosis	1.727	1.126-2.646	0.0122
Death / myocardial infarction	1.057	0.909-1.230	0.4684