

# ” Drug eluting stent failure in a large patient cohort of 142678 patients – report from the Swedish angiography and angioplasty registry (SCAAR) ”

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## BACKGROUND

Coronary drug-eluting stent in-stent restenosis (DES ISR) is a growing clinical problem that continues to be one of the most important limitations of PCI.

We used the unique Swedish angiography and angioplasty registry (SCAAR) to investigate occurrence and results of treatment of DES ISR.

## METHODS

We evaluated results of treatment of in-stent restenosis in a very large patient cohort of all consecutive coronary stent implantations in Sweden between January 1, 2005 and October 06, 2010. The data were analyzed with regard to different types of treatment, patient and stenosis characteristics. The analysis was adjusted for differences in baseline characteristics using Cox regression analysis.

142678 stents were implanted and 9031 cases of PCI-treated restenosis were analyzed. Type of stent in restenosed segment was known in 6559 patients and occurred in 4433 BMS and 2126 DES.

304 new events occurred after treatment of BMS ISR (6.9%) and 363 after treatment of DES ISR (17.1%).

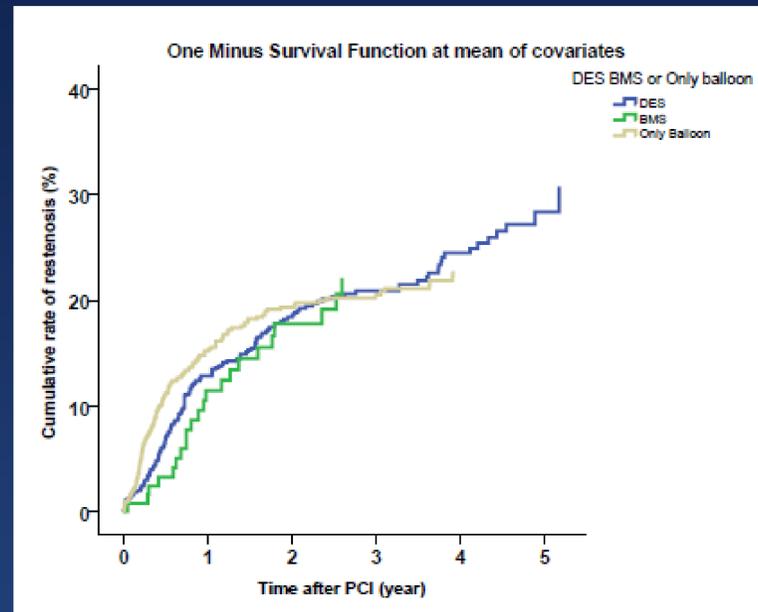


Figure1: Outcome after treatment of DES ISR

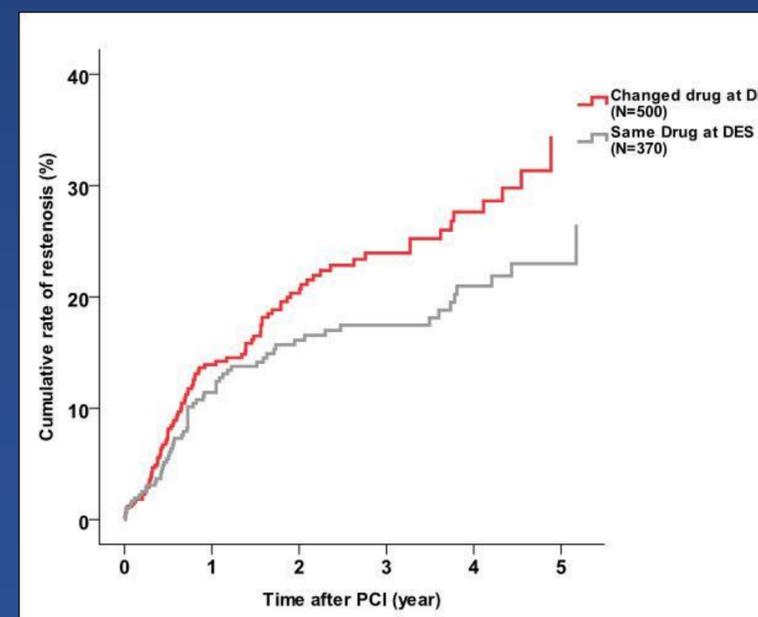


Figure2: Outcome after treatment of DES ISR with same or changed coverage on DES

## MAIN RESULTS

1. Treatment of DES ISR has worse prognosis than treatment of BMS ISR. Rate of re-ISR is 6.9% vs 17.1%
1. Neither repeated DES therapy, BMS implantation nor POBA is superior in the presence of a DES ISR (figure 1).
1. Switching between different DES drug coatings in the treatment of DES ISR with repeated DES implantation is not advantageous (figure 2).

## CONCLUSION

There is so far no therapy of choice in the treatment of DES ISR, repeated DES implantation is not superior to BMS or POBA therapy.

No disclosures