

# ”Current treatment and outcome of coronary in-stent restenosis in a cohort of 142678 patients – report from the Swedish angiography and angioplasty registry (SCAAR)”

Torsten Schwalm <sup>1</sup>, Jörg Carlsson <sup>1,4</sup>, Bo Lagerqvist <sup>2,3</sup>, Stefan James <sup>2,3</sup>

1) Department of Internal Medicine County Hospital of Kalmar, SE - 391 85 Kalmar, Sweden, 2) Uppsala Medical Research Center, 3) Department of Cardiology, Uppsala University, SE - 581 85 Uppsala, Sweden and 4) Justus Liebig University Giessen, DE - 35390 Giessen, Germany

## Background

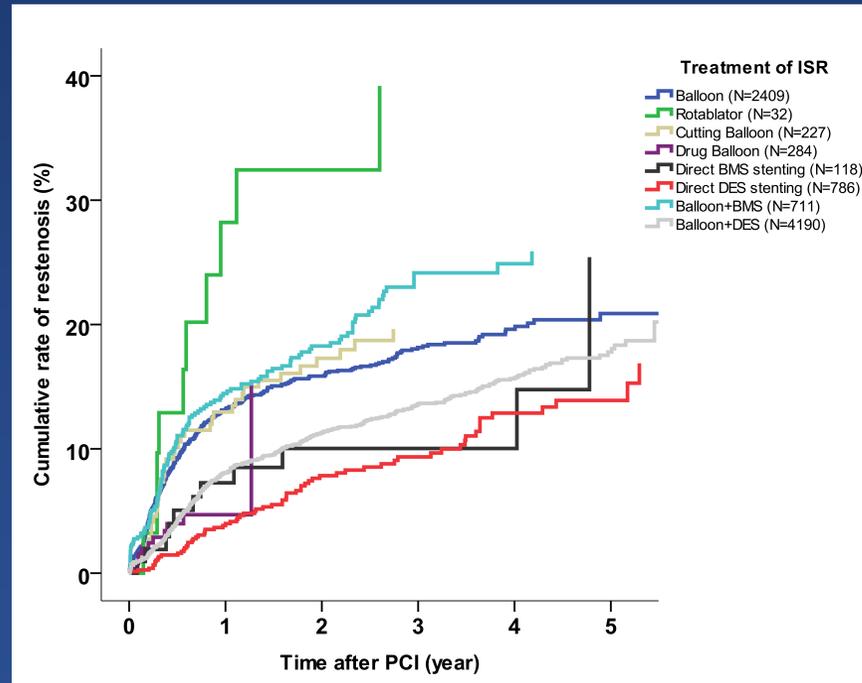
We used the Swedish angiography and angioplasty registry (SCAAR) to investigate occurrence and results of treatment of in - stent restenosis (ISR) in coronary stents.

## Methods

We evaluated results of treatment of ISR 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.

142678 stents were implanted during the time period, 9031 ISR were treated at 7134 procedures in 6191 patients.



## Results

1. Through the years 2005 (4.3%) till 2010 (6.1%) occurrence of PCI - treated ISR has not decreased, although all modern treatment strategies were available.
2. Direct DES - stenting shows a reported re - restenosis rate of 3.8 % at 1 year. Also with DEB - therapy the rate at 1 year was low but (4.8 %) on a still low number of patients.
3. Re – restenosis rate after direct BMS – stenting (7.4 %) were in the range of those after balloon dilatation followed by DES – stenting (8.3 %).
4. At one year plain balloon dilation (13.4 %) had a similar rate of re - restenosis as cutting balloon dilatation (13.4%) and balloon dilatation followed by implantation of a BMS (15.4 %) (see figure).

## Conclusion

- The reported rate of re - restenosis in ISR was generally low but differed largely according to the applied therapy.
- The use of drug eluting devices is favourable, but DE stenting *after* predilatation and *direct* BM stenting show comparable results, possibly reflecting the more complex nature of a stenosis needing predilatation.
- DEB-therapy shows first promising results.