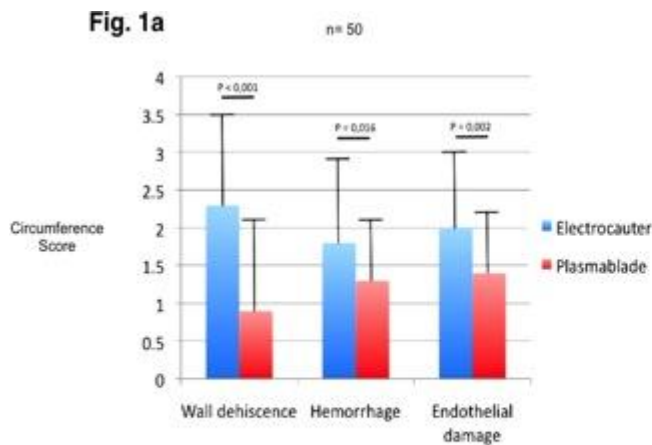**Picture / graph:**

Fig. 1a

n= 50

Fig. 1a: n=50 samples per device; significant differences (p<0.05) between both devices in wall dehiscence, hemorrhage and endothelial damage; y-axis demonstrates the Circumference Score based on the exposed part of the circumference of the vessel
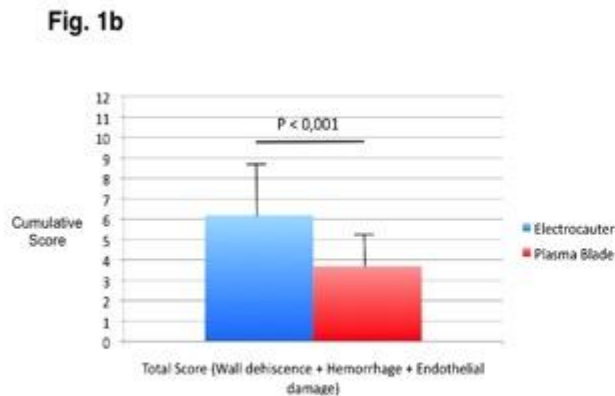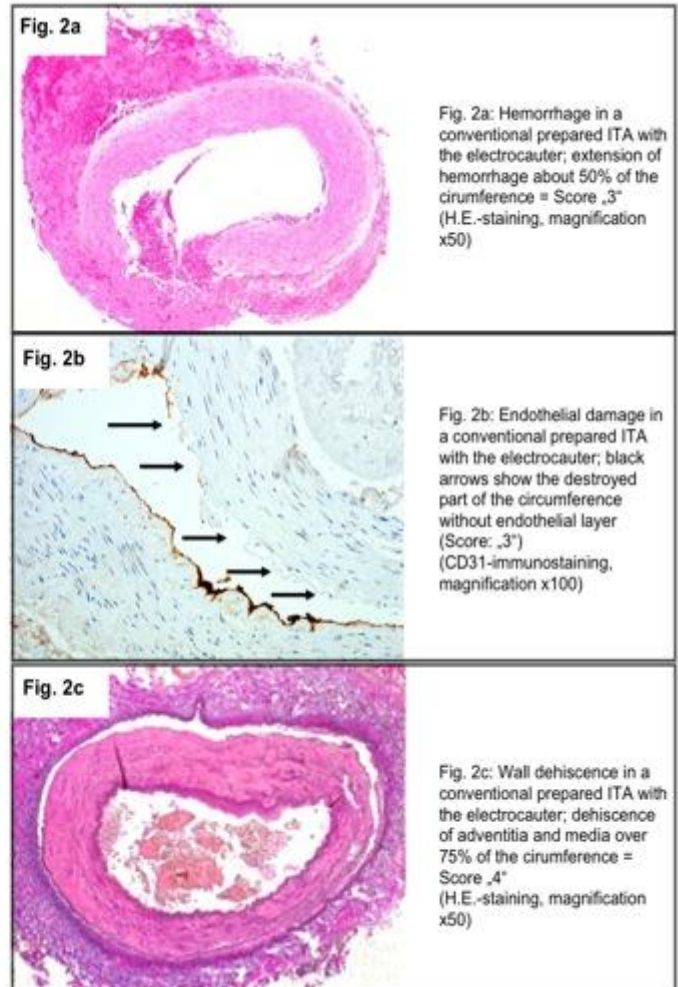
Fig. 1b

Fig. 1b: The cumulative Score shows the addition of the evaluation of all three investigated qualities of potential graft failure: wall dehiscence, hemorrhage and endothelial damage; significant difference between both devices (p<0.001).

Fig. 2a: Hemorrhage in a conventional prepared ITA with the electrocauter; extension of hemorrhage about 50% of the cirumference = Score „3" (H.E.-staining, magnification x50)

Fig. 2b: Endothelial damage in a conventional prepared ITA with the electrocauter; black arrows show the destroyed part of the circumference without endothelial layer (Score: „3") (CD31-immunostaining, magnification x100)

Fig. 2c: Wall dehiscence in a conventional prepared ITA with the electrocauter; dehiscence of adventitia and media over 75% of the cirumference = Score „4" (H.E.-staining, magnification x50)

Conclusion: PlasmaBlade for ITA harvesting is superior to conventional electrocauter, demonstrating a better wall integrity, intact endothel and lower adventitial hemorrhage. Further investigations regarding more histological samples and the final cardiac computed-tomographies in all 20 patients remain to be carried out till May 2014.
Disclosure of Interest: None declared

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Incidence and timing of definite stent thrombosis with the use of new generation drug-eluting stents in unselected patients undergoing PCI

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Introduction: New generation drug-eluting stents (DES) have been shown to reduce stent thrombosis in randomized controlled trials compared with early generation DES. Data on the incidence of stent thrombosis in unselected patient cohorts undergoing new generation DES implantation remain scarce.

Method: Between March 2009 and December 2010, 2,537 unselected patients with coronary artery disease (CAD) received new generation DES and were prospectively followed for one year. Patients received dual antiplatelet therapy including aspirin and clopidogrel for one year, with the exception of STEMI patients treated from September 2009 onwards, in whom prasugrel was used. A total of 1,250 (49%) presented with stable CAD, 705 (28%) with NSTE-ACS and 582 (23%) patients with STEMI. The type of DES used were Biolimus-eluting stents (25%), Everolimus-eluting stents (49%), Zotarolimus-eluting stents (22%) and other new generation DES (4%).

Results: The cumulative incidence of definite ST at 1 year amounted to 0.9%. A landmark analysis at 30 days revealed an incidence of ST of 0.2% after 30 days. There were significant differences in ST rates at one year stratified according to the clinical indications stable CAD, NSTEMI and STEMI (0.5% vs. 0.9% vs. 1.9%, overall p=0.03).

Picture / graph:

Figure 1A. Definite Stent Thrombosis at 30 days, at 1 year and during 30-365 days.
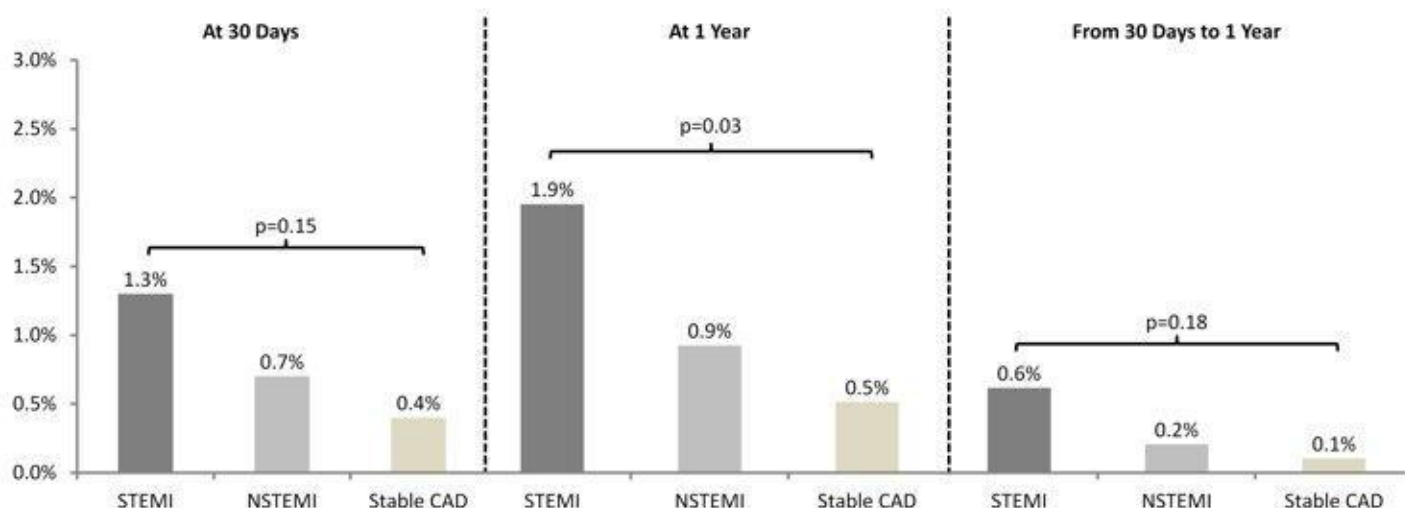
Conclusion: In a large cohort of unselected CAD patient treated with new generation DES at a tertiary center, the incidence of ST was low, albeit somewhat higher than published in randomized controlled trials. The incidence of stent thrombosis beyond 30 days has become exceedingly low. The population at highest risk for ST are STEMI patients.

Disclosure of Interest: None declared

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Estimating the costs of percutaneous coronary interventions in patients with stable coronary artery disease in the 2012 Swiss DRG environment

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Introduction: Coronary artery disease (CAD) is the health condition with the highest morbidity and mortality, as well as assumably with the highest economic burden in developed countries. Cost-estimations for patients with CAD and acute coronary syndromes (ACS) in Switzerland have been published, but not for the cohort of patients with stable CAD undergoing elective percutaneous coronary interventions (PCI) in general and in the Swiss-DRG environment in specific. Aim of the study was to close this gap.

Method: To determine health care costs from a third party payer perspective, we calculated the hospital reimbursements as defined by Swiss-DRG v 1.0 for patients with stable CAD undergoing in-hospital PCI. The number of procedures, as well as the proportion of drug-eluting (DES) and bare-metal stents (BMS) were taken from the Swiss PCI annual statistics report 2012. Per patient case-weight (CW) determinants were length of hospital-stay (LOS), number of stents placed and intervention involving a bifurcation, respectively. Their distribution was derived from the BASKET-PROVE-cohort of Swiss patients with stable CAD and a LOS between 1 and 3 days. To get the overall costs the resulting case-mix (CM) was then multiplied with a PCI-weighted base-rate, which took into account the intercantonal differences.