Optimal Antiplatelet Therapy for BVS

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As bioresorbable vascular scaffolds (BVSs) are being increasingly used in complex real-world lesions and populations, its performance versus drug-eluting metallic stents still remains poorly defined. Data from routine clinical practice suggest that it is associated with a somewhat higher rate of adverse events than occur with contemporary metallic drug-eluting stents. In particular, rates of thrombosis after implantation of BVSs can be marginally greater, especially during the early phase.

The higher risk of subacute scaffold thrombosis with BVS may be attributable to implantation technique, lesion selection and BVS design itself. BVS implantation has been related with the higher chance of edge dissection and strut malapposition, which may increase the flow disturbance, interaction between scaffold and blood, and subsequently the triggering of scaffold thrombosis in patients with high-thrombogenic milieu. Therefore, potent inhibition of platelet reactivity in these conditions might decrease the risks of scaffold thrombosis and myocardial infarction. Studies with extended follow-up in a larger number of patients are needed to fully assess the long-term advantages of balanced platelet inhibition following BVS implantation.

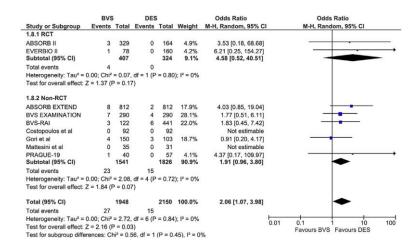


Figure. Metaanalysis of BVS vs. DES scaffold thrombosis