



TCT@ACC-i2: Interventional Cardiology

A COMPARATIVE META-ANALYSIS FOR LONG-TERM STROKE IN PATIENTS RECEIVING EDWARDS-SAPIEN VERSUS COREVALVE

Poster Contributions
Poster Hall B1
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Background: Stroke has emerged as an ominous complication after transcatheter aortic valve replacement. While short-term stroke risk of this procedure has been studied, long-term stroke risk with different valve types is not defined. We performed a comprehensive meta-analysis to compare long-term risk of two commonly used transcatheter aortic valves.

Methods: We searched SCOPUS since inception to July 2014 using predefined criteria. Sixteen studies were eligible for our analysis. Standard meta-analytic methods were used to compare stroke rates among Edwards-SAPIEN (ES) and CoreValve (CV) groups at long-term follow up.

Results: Among 8 studies, 4,480 ES valves were implanted in 4,542 patients. In the CV group, among 8 studies 1,408 valves were implanted in 1,409 patients. Patients were followed for 5,377 person years in ES vs 2276 person years in CV group. Mean follow was 1.7 years (1-3.8 years) in ES group and 1.4 years (1-2.6 years) in the CV group. During the follow up, stroke rate in the ES group was 4.5% (95% CI: 3.3-6.2) vs 6.5% (95% CI: 3.9-10.7) in the CV group, p=0.247. (Figure 1)

Conclusion: Our analysis suggests that both Edwards-SAPIEN and CoreValve have similar stroke rates over long term follow up.

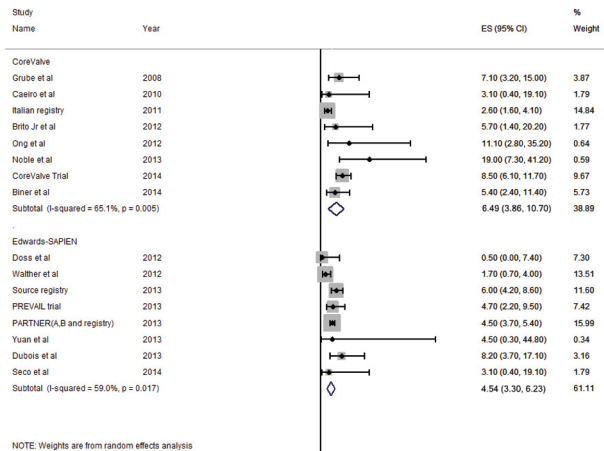


Figure 1: Incident stroke rates of long-term stroke stratified by valve type.