

ACC-i2 with TCT

PREDICTORS OF NET ADVERSE CLINICAL EVENTS POST BALLOON AORTIC VALVULOPLASTY: RESULTS FROM THE BRAVO (EFFECT OF BIVALIRUDIN ON AORTIC VALVE INTERVENTION OUTCOMES) STUDY

i2 Poster Contributions

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Session Title: Outcomes in Patients Treated with TAVR

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Authors: *Jennifer Yu, Usman Baber, Annapoorna Kini, Roxana Mehran, Georgios Vlachojannis, Samantha Sartori, Kleanthis Theodoropoulos, Prashant Vaishnava, Socrates Kakoulides, Brian O'Neill, Alan Heldman, William O'Neill, Robert Pyo, Jason Kovacic, Mauricio Cohen, Samin Sharma, George Dangas, Mount Sinai Medical Center, New York, NY, USA, University of Miami Medical Center, Miami, FL, USA*

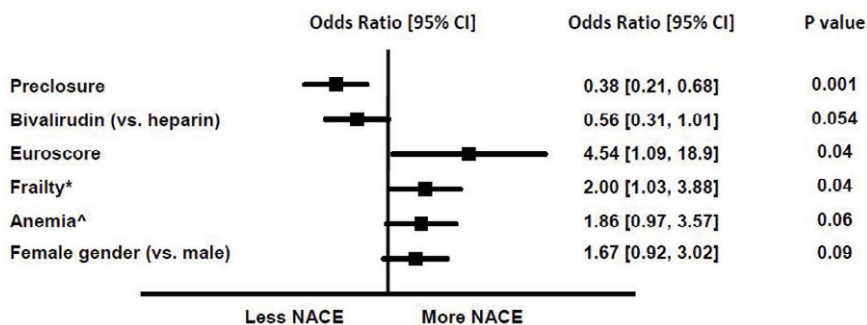
Background: Pts with severe aortic stenosis at extreme risk for surgery can have balloon aortic valvuloplasty (BAV) for treatment of symptoms, or as a temporizing step prior to transcatheter aortic valve replacement. However, post-procedural complications such as bleeding, vascular complications and stroke are common. The predictors of adverse outcomes post BAV are not known.

Methods: We examined the in-hospital outcomes of pts who underwent non-emergent, retrograde BAV from January 2005 to July 2011 with heparin (UFH) or bivalirudin as procedural antithrombin. Net adverse clinical events (NACE) were a composite of mortality, myocardial infarction, stroke and Bleeding Academic Research Consortium type ≥ 3 bleeding. All events were adjudicated by an independent CEC who were blinded to the antithrombin used.

Results: Of 428 patients, 205 (48%) had UFH and 223 (52%) had bivalirudin. "Preclosure technique" for closure of the BAV access site was attempted in 245 pts (57%). The mean age was 83 ± 9 , 45% were male, and 18% were considered frail*. The mean logistic Euroscore was 22.1%. 66 pts (31.2%) had an adverse event post BAV. The figure shows the independent predictors of NACE.

Conclusion: In this large review of BAV in elderly, high risk pts, frailty and the Euroscore were significant predictors of poor outcomes with increased rates of NACE. Access preclosure was independently associated with a reduction in NACE, and bivalirudin approached significance with respect to reduced NACE.

Figure. Independent Predictors of In-Hospital, Net Adverse Clinical Events Among Patients undergoing Balloon Aortic Valvuloplasty



*Patient was considered frail if bedbound, dependent for all activities of daily living, had moderate or severe dementia, or a nursing home resident. ^According to WHO criteria.

Other variables considered but not included in the final model were age, eGFR, peripheral vascular disease, warfarin use, history of prior BAV and number of arterial access sites used.