Update on ATACAS: a Randomized Trial of Aspirin and Tranexamic Acid in Coronary Artery Surgery

Paul S. Myles¹²; Sophie Wallace¹; Brendan Silbert³; John McNeill²; Jamie Cooper¹²; Don Esmore¹²; Julian Smith³; John Knight⁴

¹ Alfred Hospital, Melbourne, Australia  
² Monash University, Melbourne, Australia  
³ St Vincent’s Hospital, Melbourne, Australia  
⁴ University of Flinders, Adelaide, Australia

**Introduction:** Aspirin is associated with increased bleeding during and after cardiac surgery, but it may also reduce thrombotic complications. We do not know whether there is a net benefit or risk from stopping aspirin. Antifibrinolytics such as tranexamic acid can reduce bleeding after cardiac surgery, but we do not know whether antifibrinolytics increase the risk of thrombotic complications such as MI or stroke. There are no large randomized trials to guide our practice.

**Methods:** ATACAS is a large multicentre international trial testing whether aspirin and/or tranexamic acid should be used routinely in coronary artery surgery. See: www.atacas.org.au. The primary endpoint is a composite of death and major thrombotic complications at 30 days after surgery. Secondary endpoints include MI, stroke, blood transfusion, and reoperation for bleeding. The sample size of 4,600 patients (α 0.05, β 0.10). Concern for excessive bleeding and seizures (TxA) prompted us to conduct a preliminary safety analysis of study patients to date.

**Results:** The first safety analysis includes 744 patients from 10 centres (including Alfred, St Vincent’s, Austin, Monash, Flinders, Royal Adelaide, Bristol, Hong Kong, Royal Prince Alfred, Royal Perth). The study population consists of age 66 (10) yrs, female 17%; medical conditions include diabetes 31%, previous MI 39%, heart failure 11%, and COPD 12%. NYHA 1 (13%), 2 (59%), 3 (23%) and 4 (4%). 14% had a red cell transfusion intraoperatively, and 30% by day 1. Overall bleeding complications include tamponade 0.7%, major haemorrhage 2.6%, & peptic ulceration 1.4%; there have been 3 seizures (0.4%). The 4 and 24 h mediastinal drainages were 337 (285) and 896 (610) ml, respectively.

**Conclusions:** Despite being an at-risk cohort, there does not appear to be excess major bleeding complications or seizures in patients recruited to ATACAS. We are seeking new cardiac centres to join in our effort to complete the ATACAS trial. We provide funding of around $1000 per patient enrolled. If interested, please contact Paul Myles (p.myles@alfred.org.au), for more details.


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