Reviewer's report

**Title:** The percutAneous Coronary inTervention prior to transcatheter aortic VAle implantation (ACTIVATION) trial

**Version:** 2  
**Date:** 17 April 2014  
**Reviewer:** George Thanassoulis

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The protocol submitted by Khawaja consists of an open label randomized controlled trial of 310 patients to test the non-inferiority of combined PCI+TAVI vs TAVI alone on a composite primary outcome of 12 month mortality and rehospitalisation. There are also several secondary end-points assessing efficacy and safety. Overall, this is an interesting protocol that addresses an important clinical question that pertains to TAVI.

**Major Compulsory Revisions:**
1. My major concern with manuscript is the readability and clarity of the Background section. The authors should review this section. Specifically, p.7, line 11: "Other variables such as approach were not identified". Please clarify this statement.  
   p.8, line 5: "The one year overall mortality is..." Please clarify this statement.  
   p.8, line 6: "A Swiss group reported..." Can the authors provide the actual data rather than simply stating "showed no difference".  
   p.8, line 8: "More recently Goel et al..." This sentence is unclear. Please rephrase.  
2. In the methods (p.9) can the authors further clarify why a non-inferiority (as opposed to a superiority) design was chosen.  
3. In the statistical considerations p.15, 2nd paragraph, can the authors further clarify and provide more context for the sentence "From a rehospitalisation and PCI perspective..."  
4. Conclusions, p16, final sentence: Given the rate of concomitant CAD...". Please complete this sentence.

**Minor Essential Revisions**
1. There were several typographical errors. Please revise accordingly. Here are a few that I noted:  
   p.7, line 13: "...OR a stenosis of >50% and noted..." Add "was" before noted.  
   p.7, line 17: "...and higher logistic Euroscores." Add "in patients with CAD" at the end of the sentence.

**Level of interest:** An article whose findings are important to those with closely
related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests