Reviewer’s report

Title: Sequencing of NOTCH1, GATA5, TGFBRI AND TGFBRII genes in familial cases of Bicuspid Aortic Valve

Version: 1 Date: 3 January 2013

Reviewer: Muhammad Tariq

Reviewer’s report:

Foffa et al investigated the genetics of BAV in certain families. I have following suggestions to address.

Major:
1) I am not convinced with the sequencing traces in Fig 2. I would suggest to repeat the sequencing for 2 specific NOTCH1 mutations/variants.
2) Missense mutation P284L in NOTCH1 is known as a neutral polymorphism at Exome sequencing server (ESP) http://evs.gs.washington.edu/EVS/.

Minors:
1. Title: “Genetic screening” instead of “Sequencing”
2. Gene symbols should be in italics throughout manuscript.
3. Mutations in NOTCH1 identified in this study include one missense and one non-sense. Correct this in abstract.
4. Abstract should start with very short background of BAV and its genetics.
5. Results section: Shorten the detail of genetic variants found in GATA5 and TGFBRI/I result section and refer them to tables only.
6. Figure 1: Identify the proband with arrow from left side (as in family H).

Level of interest: An article of limited interest

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.