Reviewer's report

Title: Adverse events in families with hypertrophic or dilated cardiomyopathy due to mutations in the MYBPC3 gene

Version: 1 Date: 10 September 2008

Reviewer: pascal mckeown

Reviewer's report:

The authors have provided a summary of their experience of managing patients / families with hypertrophic cardiomyopathy and dilated cardiomyopathy in whom a mutation in the myosin binding protein C was identified. This work does add to the knowledge base in this field.

I feel that some revisions are needed and have summarised them below:

Major Compulsory Revisions

1. No data on ECG data have been provided - do the authors have this information?
2. Some of the novel mutations have been identified in single patients / small families. The authors need to expand their discussion regarding the difficulty of interpretation of these findings before such information would be used for predictive testing in families (they have indicated that they were able to undertake segregation analysis in only 1 family).
3. Adverse Clinical Events: the authors need to provide more discussion to clarify that not all of the adverse events are necessarily due to the underlying cardiomyopathy - for example, atrial fibrillation has many potential causes.
4. Discussion - page 13 - what is meant by 'premature atrial fibrillation'?
5. There are some disparities between the information provided in Table 1 and the Figure (for example, please check families 12, 13, 14).
6. Table 2: for some of the patients there are no data for either ECHO or MRI - by which criteria were these individuals given the diagnosis of cardiomyopathy?
7. Table 3: what is meant by positive EPS?
8. Was there any post-mortem material available for any of the sudden deaths? I presume that this was available as the authors have commented on the fact that patient IV-3 from family 12 had severe hypertrophy.
9. The authors have used DGGE as a screening tool for mutations - they should provide some information about the sensitivity of this approach for detection of mutations.
10. Where did the control DNA samples come from?

Minor Essential Revisions
1. Table 3 - family / patient 9 has previously been assigned as SP but has been given a pedigree position in this Table.
2. there are some minor grammatical errors.
3. Methods/patients - classification of LVEF - mild 45-55%, moderate 30-45% - need to place one of these as either >45 or <45
4. Results - the first line is a duplication of information in the Methods section
5. Page 9 - what is meant by evidence-based treatment?
6. Died due to a sudden death - should not have died and death in the same phrase.

**Level of interest**: An article of importance in its field

**Quality of written English**: Acceptable

**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.