Reviewer's report

Title: Late onset Li-Fraumeni syndrome with bilateral breast cancer and other malignancies: case report and review of the literature

Version: 1 Date: 29 January 2012

Reviewer: David Malkin

Reviewer's report:

This is an interesting article based on an unusual LFS case report.

Major Compulsory Revisions:

1. There are numerous grammatical errors - the manuscript would benefit from a careful read and editing to correct the English.

2. In the introduction, a statement is made (and citation #5) that the increased lifetime risk in women compared to men, is related to the increased breast cancer incidence. This is only partially correct as recent publications by the Strong group suggest the increased risk in females is pervasive at all ages. This should be noted.

3. Some clarification of the delay to biopsy of the 'incidental tumor' should be made. It is not clear why biopsies was delayed, or what is meant by 'incidental tumor'.

4. It would be very important to know the TP53 status of the various tumors. Is there LOH? Is there no LOH? These findings are particularly important in light of the lengthy discussion of the mechanisms for tumor formation in TP53 mutation carriers.

5. The Discussion, though interesting, is far too long. It really tries to cover everything from mechanisms of TP53 loss of function in tumors, to relevance to treatment options. While these questions are relevant to the case, without the somatic TP53 data on these tumors, the relevance of the discussion to the case becomes harder to correlate.

6. In the section in the Discussion on Difference between somatic and germline, what is the meaning of the last sentence?

7. The point about the case discussion that the treating physicians decided to 'cancel' radiation of the breast cancers based on the TP53 finding is important, as this has not generally been specifically defined in the published literature, although much discussion about appropriate treatment decisions has been made (some of which is cited).

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

Quality of written English: Not suitable for publication unless extensively edited
Statistical review: No, the manuscript does not need to be seen by a statistician.