Reviewer’s report

Title: Colorectal cancer incidence in path_MLH1 carriers subjected to different follow-up protocols: a Prospective Lynch Syndrome Database report

Version: 0 Date: 15 Aug 2017

Reviewer: Wendy Kohlmann

Reviewer’s report:

This is an interesting study design for analyzing the effectiveness of colonoscopy screening intervals in LS. Your analysis found no difference in cancer incidence between those screened every 3 years and every 1 to 2 yours. You advocate that continued adherence to current protocols is recommended, but suggest that CRC in path_MLH1 carriers may not develop from polyps that cannot be detected with screening.

While you did not find a differences based on screening interval, Table 2 notes several studies which demonstrated a reduction in cancer incidence or improvement in survival in screened versus unscreened patients. In order to avoid your findings being misconstrued to mean that screening is not helpful, please expand upon your description of the data in table 2 in the background.

The data in table 5 indicates that approximately half of the cancers that developed were detected within 2 years of a screening colonoscopy. Whereas the other half of the cancers were occurred outside of routine screening intervals. You indicate that you did not include stage in this analysis; however, that information would be valuable in order to better understand the cancers that are developing during screening. It seems that data would be available from your comprehensive dataset and it would strength the paper to at least report what was seen. If it is not going to be included because of plans to address this in future manuscripts, it would be helpful to more specifically outline plans for further analyses.

The conclusion of the manuscript strongly states that despite the lack of resolution about the optimal screening interval, colonoscopy screening is still recommended. However, the abstract does not include that recommendation. Because some readers may not get past the abstract, please modify the abstract conclusions to indicate that screening is still indicated as this topic continues to be investigated.

Level of interest
Please indicate how interesting you found the manuscript:

An article of importance in its field

Quality of written English
Please indicate the quality of language in the manuscript:
Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal