Article ID: 2019-0167
Article title: Genetic testing in families with hereditary colorectal cancer in British Columbia and Yukon: a retrospective cros

sectional analysis

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Bedard PhD, Sophie Sun MD, Kasmintan A. Schrader MBBS MD		
Reviewer comments	Author response	
Reviewer: Daniel Rayson		
Institution: Queen Elizabeth II Health Sciences Center, Medical		
Oncology		
Please specify the timeline horizon for the risk estimates for the Lynch syndrome and FAP noted in paragraph 1.	We agree with the reviewer, and we have addressed this in the text.	
Please more formally describe inclusion and exclusion criteria. In particular, the concept of in-province testing of both index and carrier testing. It is raised first in paragraph 3 almost as an off-hand comment and then repeated numerous times throughout. You do acknowledge the limitations in the data due to this inclusion criteria and the possible (likely) underestimation of carrier testing in your discussion. I think this needs to be made more clear right up front for both index and carrier cases. The Discussion on limitations could also be stronger due to this key fact.	We agree with the reviewer, and we have addressed this in the text.	
Please clarify paragraph 4, last line. I assume you are referring to the time interval between index and 'first' carrier test result?	This has been clarified in the text, and we have adjusted the wording accordingly. It is not only the first carrier test, since a second, third, etc. carrier test may be relevant to the time from index testing, for example in siblings. The median time is reported in table 1.	
Please include the denominator for the 245 index patients, i.e. total number tested in-province to give the reader a sense of result positive rate among those tested.	We agree with the reviewer, and we have addressed this in the text.	
If data are available, it would be of interest to know how many of the 67 cancers diagnosed as described in line 1 of paragraph 12 were early-stage and therefore treated with curative intent vs late stage. This data should be available within the BC cancer registry, I presume.	Although we agree this would be interesting, unfortunately staging is not readily available in the BC Cancer registry. It would require detailed individual chart review, so will not be possible for this study.	

It would be of interest, if feasible, to describe socioeconomic status (SES) as one of the demographic variables that could influence testing uptake. Additionally, are you able to ascertain data by ethnicity including Asian and Indigenous populations given the demographics of BC and the Yukon? Table 2: please provide the sample size (n) for all cells I am not sure that Figure 2 adds much meaningful information beyond what is presented in Figure 1 and the overall and Lynch-specific value. [Editor's note: in your response, please be clear as to the value of this second Figure I may not be understanding Figure 3. Are the colors of the bars inverted as compared to the Figure description? Even so, I am not sure that Figure 4 adds much. Information beyond what is described in the body of the manuscript. As well, as per comment 2 above, your data are limited by the restriction to in-province testing only. I am not sure that Figure 4 adds much. Reviewer: Karen Panabaker Institution: London Health Sciences Centre, London Regional Cancer Program This information is not available in the medical chart review was involved, including per defined and the value of interesting outside of BCV rukon. Given that a careful chart review was involved, including pedigree analysis, it would be helpful to document what percentage of FDRs actually live in BCV/rukon. I would also like to point out that many clinics may not accept self-referrals (mine included), which actually is a factor that likely improved the cascade carrier testing rate at HCP in comparison to other clinics. This is part of another study we agree with the reviewer, and we have addressed this in the text. We agree with the reviewer, Figure 3 has been deleted. We agree with the reviewer, Figure 4 has been deleted. We agree with the reviewer, Figure 4 has been deleted. We agree with the reviewer, Figure 4 has been deleted. We agree with the reviewer, Figure 4 has been deleted. We agree with the reviewer, Figure 4 has been deleted. We agree with the reviewer		
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to other clinics. This is particularly a barrier in many places where patients are often struggling to find a family physician. Lastly, there was no mention in this study regarding the inherent low uptake of referrals to Genetics for hereditary colon cancer syndromes, in general, primarily in comparison to referrals for	self-referrals (mine included), which actually is a factor that likely	the text.
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low uptake of referrals to Genetics for hereditary colon cancer syndromes, in general, primarily in comparison to referrals for important point. However, we didn't provide data on breast referrals in the manuscript, and there are only a very limited		
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	low uptake of referrals to Genetics for hereditary colon cancer	
	syndromes, in general, primarily in comparison to referrals for	referrals in the manuscript, and there are only a very limited
· · · · · · · · · · · · · · · · · · ·	hereditary breast cancer. It has been cited that the social context	

of colon cancer, i.e. people don't like to talk about their bowel or consider having a colonoscopy, may well play a role in the low referral rates for these conditions, despite being as prevalent as hereditary breast cancer. To this point, I found it interesting that the CHEK2 gene was associated with one of the highest carrier test frequencies and lowest median time difference from index test to carrier test. This could be explained by the fact that the main cancer risk associated with CHEK2 is breast, and women/men are more amenable to talk about this risk and do something about it, in comparison to colon.	able to confidently comment on this point. But we are very thankful and should be a topic of future research.
I found Figure 3.0 to be very confusing. I understand the concept the author is trying to illustrate, however, perhaps there is a different way to do this.	We agree with the reviewer, Figure 3 has been deleted.
Additional change	The Supreme Court has heard the case, and this section has been updated