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Title	**Screening for a new primary cancer in patients with existing metastatic cancer**
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Reviewer 1	Kevin Martell MD
Institution	Radiation Oncology, University of Calgary, Calgary, Alta.
General comments (author response in bold)	Comments to the Author An interesting paper which I believe is appropriate for the CMAJ audience. It emphasizes the need for continued efforts in education for screening best practices in oncology. On review I have a few minor suggestions for potential improvements. Methodology: Within your methods page 5 line 22 you mention only stage IV patients at diagnosis were included. Recognizing this study hails from administrative data is it possible to include those patients who were originally diagnosed with stage I-III but developed metastatic disease within your study dates? If yes, this would be more informative provided you then also remove having a prior diagnosis as an exclusion criterion. If not, an explanation as to why should be offered to the reader and your claims and conclusions should be adjusted to reflect their application to a narrower population. It would be of considerable interest to include further subpopulations such as metastatic gynecologic or head and neck malignancies if data are available. **Response: We thank the reviewer for the interest in our work and helpful comments.** The most reliable definition of stage within our cohort includes an administrative database code for metastatic disease (stage IV). Although this narrows the population of our study to those with stage IV disease at presentation, we feel this is the most relevant population in which screening is unlikely to offer benefit. We have highlighted this in the limitations section of our paper. **Although our initial focus has been on the most common malignancies in Canada, we will certainly consider expanding to further subpopulations in the future.**
Reviewer 2	Jeffrey Bakal PhD
Institution	University of Alberta, Canadian VIGOUR Centre
General comments (author response in bold)	I think that overall this is a reasonably presented simple analysis of the data. I would assume the group involved has access to more recent data and thus the ability to conduct the followup study. Outside of that. I think the authors can better explain the methods they used to get at the outcomes, rather than listing the guidelines in the methods. **Response: We appreciate the careful reading of the manuscript and have made changes as tracked in the resubmission. We have provided more clarity (along with subheadings) in the Methods section of our paper and justification for the original study time period.**
Reviewer 3	Alejandro Lazo-Langne MD MSc
Institution	Department of Medicine, Division of Hematology, University of Western Ontario, London, Ont.

General comments (author response in bold)	The authors present the results of a population-based retrospective cohort study assessing the use of malignancy screening in patients with metastatic cancer. They show that the use of screening is frequent in this population. The study is well conducted and the manuscript well written. I do not have methodological concerns. The only thing is that it would be interesting to add data regarding the overall use of screening in non-cancer populations with limited life expectancy (e.g. advanced CKD). I appreciate that this is not the objective of this study, but if available, please add. Also, probably needs to be highlighted that a significant number of patients were screened between year 1 and 3, which suggests that screening may be influenced by the observed survival of an individual patient. (i.e. assuming that the patient is alive in 1 year, that may influence screening decisions). Curiously, this seems to be more the case for CRC than BC, but this may be influenced by survival according to cancer type, (suggested by an equeal frequency of screening at 1 yr and from y 2-3 in prostate cancer). Please comment on this **Response: We appreciate the response and feedback from the reviewer. With this submission, we were only able to focus on screening within the (metastatic) cancer population. Our aim had been to document the extent of screening within the population targeted by the Choosing Wisely Canada statement. We were able to use previously-validated definitions to identify the relevant cohorts of patients with metastatic disease at diagnosis. Although we would also be curious about the practice of screening in other non-cancer patients with limited life expectancy, at present that analysis would be out of scope.** **We appreciate the insightful comment around the timing of screening and the observed or anticipated survival. Figure 1 does illustrate a continuous increase in cumulative incidence of screening within the first 3 years of diagnosis. It is possible that screening practices were influenced by the perceived or anticipated survival of individuals within the cohort. In support of this, we did find that screening is higher in patients with metastatic cancers generally associated with longer survival (i.e. prostate cancer). However, we are unfortunately unable to determine using administrative databases the intent and forethought that preceded a screening procedure on an individual basis; these insights as such remain speculative. We have added comment in paragraph 3 of the interpretation.**