Peer Review File

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Reviewer A

Comment 1: In the analysis they identify 36 studies, the vast majority of these papers are from the US, a small part is from Canada. It remains unclear why other publications relating to IPNs were not included for example from Germany or Spain. Were overseas publications explicitly excluded or was the focus on North American, since the country of interest is Canada? This focus should be better explained because it may very well be possible to learn from other countries how such findings are reported and the work-up organized. (The reviewer has no relationship with any of these references)

Schmid-Bindert G, Vogel-Claussen J, Gütz S, Fink J, Hoffmann H, Eichhorn ME, Herth FJF. Incidental Pulmonary Nodules - What Do We Know in 2022. Respiration. 2022;101(11):1024-1034. doi: 10.1159/000526818. Epub 2022 Oct 13. PMID: 36228594; PMCID: PMC9945197.

Trinidad López C, Delgado Sánchez-Gracián C, Utrera Pérez E, Jurado Basildo C, Sepúlveda Villegas CA. Incidental pulmonary nodules: characterization and management. Radiologia (Engl Ed). 2019 Sep-Oct;61(5):357-369. English, Spanish. doi: 10.1016/j.rx.2019.03.002. Epub 2019 May 6. PMID: 31072604.

Reply 1: Thank you for your comment and question. The country of interest for this manuscript is Canada, such that we chose to focus the literature search to North America given the paucity of literature available directly from Canada. We acknowledge that there are international perspectives to learn from and that findings from other countries could be applicable to Canada as well. To reflect this, we have made revisions to the text as outlined below.

Changes in the text: We have added the suggested references in the Introduction (see Page 4, lines 53, 59, and 62). We also clarified that the review focuses primarily on North American settings where the majority of IPN research has been conducted and where it is the most contextually relevant for Canada within the North American context. This is elaborated upon in the Main Findings section (see Narrative literature review subsection on Page 8, lines 137-140). We also added a reference provided by the reviewer to highlight that our findings align with international perspectives in the Main Findings section (see Clinical implications subsection on Page 14, lines 255-256).

Comment 2: The nature of incidental findings is that they were not expected and therefore the initial radiological requisition had a different diagnostic focus. It is therefore understandable, that the referring doctor may not have provided the detailed smoking history or number of packyears, since the indication for the radiological examination was not focal lesions in the lung

or similar. It is therefore easy to say or conclude that "poor requisitions" or insufficient patient information is a problem, in view of an IPN this is understandable but not always avoidable. An electronic medical patient record which is widely available or accessible may solve some of these issues, since the radiologist can then actively access the missing information. This could be discussed or mentioned as a possible solution.

Reply 2: Thank you for your comment. We agree with the potential of EMRs to address issues related to missing information on radiology requisitions. We also acknowledge that it may not be efficient from a workflow perspective for radiologists to search EMRs for relevant patient information, but that electronic strategies that automatically populate this information could be beneficial.

Changes in the text: This use of EMRs was not suggested in our interviews but we have added this suggestion to the Main Findings section (see Page 14, lines 267-269).

Comment 3: I was wondering if patient education could address some of the issues at hand in such a way that the patient is empowered to also take on some responsibility for the work-up of the IPN. This aspect I found was insufficiently covered by the manuscript, although I personally do not know how extensive the published evidence is that supports this approach. Since only a small amount of IPNs turn out to be malignant the decision to have a work up done is defined by guidelines but it may also be dependent on patient views/attitudes in which case shared decision making may be relevant and should be at least considered here, even though none of the experts seemed to have mentioned this. At least the concept of shared decision making should be mentioned in a setting where the vast majority of work-up's will lead to a benign pathology and the emotional side of the evaluation (or even collateral damage associated with the uncertainty or actual work-up) could be considerable. I suggest at least discussing the option: the patients may want to opt-out of an evaluation process which may be undesirable to them and cause emotional distress. This is where shared decision making comes in and the PCP will play a key role.

Reply 3: Thank you for your insightful comment. We agree that patient education and shared decision making are important areas in IPN management, however this was not a main finding in either the literature review nor the KOL interviews, though it was mentioned by a few KOLs.

Changes in the text: We agree with the reviewer, however, and have now included this in the text under Theme Two: Suboptimal communication between radiologist and ordering physician, between healthcare providers, and with patients (see Page 12, lines 228-230). Furthermore, we highlight that this is something to be explored in future research, in the Main Findings section (see Clinical implications subsection on Page 16, lines 308-311).

Reviewer B

Comment 1: I think it is good review to identify the nature of treatment of lung nodule. I would like to see the discussion of difficulties of implementing lung nodule guideline into this review.

Reply 1: Thank you for your valuable feedback. We appreciate your suggestion to discuss the challenges of implementing lung nodule guidelines in our review. In response to this, we have incorporated a discussion on the difficulties of implementing guidelines, specifically considering the Canadian context and the insights gained from our results.

Changes in the text: To address this, we added this discussion to the Clinical implications section (see Page 16, lines 292-300) to highlight barriers to guideline adherence and the need for future research in this area.