Peer Review File

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Reviewer A Comments:

A well-written narrative on decision aids for low-risk thyroid cancer. It is an enjoyable read and the topic is relevant.

Comment 1: While this is a succinct summary of the current state of decision aids in the management of patients with low-risk thyroid cancer, I am not sure if the "challenges" per se has been adequately discussed. Perhaps there is no need to specify that in the title. **Reply 1:** We have updated the title and removed "The Challenges of Treatment Equivalence". **Changes in the text:** We have modified the text (pg 1 line 1-2).

Comment 2: Note: Table 2 caption does not match the table. **Reply 2:** We have updated the title to "Table 2. Thyroid cancer decision aids in the literature at different decision points of management."

Changes in the text: We have modified the text (pg 19 line 446).

Reviewer B Comments:

This is a very nice, well-written review of the current state of the literature on decision aid tools in thyroid cancer management, with a focus on extent of thyroid surgery. The authors conclude that more research is needed on this topic as such tools could help to improve patient satisfaction and quality of life considerably, in the case of patients with low-risk thyroid cancer where different treatment options yield similar benefits in terms of disease-specific survival (DSS).

Comment 1: My only comment/suggestion is that the focus of the review is on tools to aid decisions regarding extent of thyroid cancer surgery -- the authors may want to consider broadening the focus and conclusions to include decision aid tools on radioactive iodine ablation (RAI) as there is increasing evidence that use of RAI also does not improve DSS for patients with low-risk thyroid cancer. Although the study by Sawka is mentioned, it seems there is a need for more research in this area.

Reply 1: We agree with the reviewer that there is need for more research in deciding when to recommend RAI. To satisfy the reviewer, we have added more content regarding RAI. **Changes in the text:** We have modified the text (pg 6, line 118-124, pg 12 line 275).