Reviewer’s report

Title: Investigations of Organ and Effective doses of Abdominal Cone-Beam Computed Tomography During Transarterial Chemoembolization Using Monte Carlo Simulation

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Reviewer: Jeong Hee Yoon

Reviewer's report:

This single center retrospective study is of evaluation of effective dose for C-arm cone beam CT during TACE.

C-arm CT is used increasingly for procedure from neurovascular intervention to non-vascular intervention, it would be clinically relevant to know the radiation exposure during the procedure.

The dose-area product-to-effective dose conversion factors were derived from the data, and it would easily provide the information on the radiation-induced risk to the patients.

The findings (ED increases with BMI and ED-to-DAP ratio decreases with high BMI) were consistent with literature, and indeed there are already several papers for C-arm CT.

However, the discussion is solid and thorough, and would prefer to urge the publication.

*please add ranges for tables.

**figure 2a is inconsistent with the results: ED slightly increases with BMI, but the figure seems to be a relationship between ED-to-DAP and BMI.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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

Needs some language corrections before being published

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