Reviewer's report

Title: Role of the external irradiation to the neck region on the intima media thickness of the common carotid artery.

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Reviewer: Rosa Sicari

Reviewer's report:

This is a very interesting manuscript addressing an important side effect of a life-saving therapy. Radiation-induced atherosclerosis is a well known side effect of radiation therapy described in several sites of irradiation (chest, neck etc.). There are several limitations that authors should address:

1. Please tone down the conclusions of the abstract section of the manuscript: IMT is not synonymous of disease but is an imaging biomarker related to the chance of developing disease.

2. In the background of the manuscript the paragraph before the aim of the study should be rewritten since it is well known the role of IMT as a risk factor and its relation with the development of cardiovascular events.

3. In the methods section of the manuscript the definitions of arterial hypertension, hypercholesterolemia etc. should refer to the conventional definitions and the relative references.

4. The major limitations of the study are related to the small patient population, the lack of the use of a quantitative method for the measurement of IMT and the short time between IMT assessment and radiotherapy. Please address.

5. Patient selection should be better detailed.

6. The results are presented in a quite confusing way. The conventional risk factors as well as age should be weighed when analyzing the increase of IMT.

7. The discussion should have a paragraph on clinical implications. The recommendations given by authors should be toned down since the population is small and the routine assessment of IMT may not be sustainable.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

'I declare that I have no competing interests'