Reviewer's report

Title: A Post-market, Multi-vessel Evaluation of the Imaging of Peripheral Arteries for Diagnostic Purposes Comparing Optical Coherence Tomography and Intravascular Ultrasound Imaging (SCAN)

Version: 0 Date: 07 Dec 2019

Reviewer: Jinwei Tian

Reviewer's report:

The work of this paper is practical and logical. The advantages and disadvantages of OCT and IVUS on observing peripheral vascular diseases were compared in detail and statistical methods were used appropriately. And it has a good application prospect. However, there are still the following details that need to be improved and explained:

1. The innovations of this paper are not sufficient. As far as I know, German doctors had published a similar prospective study in 2013.

2. The research methods were not fully explained, the inclusion and exclusion criteria were too broad. Furthermore, the author did not provide a specific definition and classification of peripheral artery diseases, which may affect the results of the study and even endanger the health of patients.

3. Whether pull-back by doctors rather than machine will affect the image quality?

4. When capturing and analyzing the image at the distal point, midpoint and proximal point, the vascular situation should be specified. Both OCT and IVUS can identify normal blood vessels very well, but there may be a difference in lesion location.

5. It is suggested that some diagrams should be added to clear the process of marking the target blood vessels.

I suggest that this paper being accepted after further modification.

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.

Yes

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 recommend additional statistical review

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

Acceptable

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