

23 July 2013

Dear Editor,

Please find enclosed the edited full-text manuscript in Word format (file name ESPC Manuscript No: 4507.doc).

Title: Part II: Radiation dose measurements in coronary CT angiography

Author: Akmal Sabarudin, Zhonghua Sun

Name of Journal: World Journal of Cardiology

ESPS Manuscript NO: 4507

The manuscript has been improved according to the suggestions of reviewers:

1. Format has been updated

2. Revision has been made according to the suggestions of the reviewers:

- The manuscript provides a nice overview of radiation concepts, and of methods to calculate radiation doses during coronary CT angiography procedures. Two important issues should be addressed: 1) Most Institutions worldwide, as well as most published papers, use the chest conversion coefficient (0.014-0.017). It is critical that the authors clearly explain why a higher conversion factor should be applied (0.026). 2) Median / Mean effective dose radiation of cardiac CT studies are not shown. Furthermore, the numerous highly effective and routinely used approaches to reduce dose radiation (prospective gating, tube modulation, high pitch acquisitions, iterative reconstruction....) are not described. It should be stressed that coronary CT examinations are currently performed at very low radiation doses (mostly 1 to 4 mSv). Please review grammatical issues.

Response: Thank you for providing constructive comments. Explanation has been provided regarding the use of 0.026 conversion factor when compared to the routinely used conversion factor of 0.014-0.017. Mean effective dose of coronary CT angiography has been provided in the section of effective dose, while dose reduction strategies are provided in the series III article. A summary sentence has been provided to indicate the effective outcomes of reducing radiation dose to as far as 1 mSv. Grammatical errors have been corrected.

Thank you again for publishing my manuscript in the *World Journal of Cardiology*.

Sincerely yours,



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