Reviewer's report

Title: Influence of trigger type, tube voltage and heart rate on calcified plaque imaging in prospectively ECG-triggered high pitch cardiac computed tomography

Version: 2
Date: 17 July 2014
Reviewer: Sebastian Leschka

Reviewer's report:

Abstract:
Purpose: Modify the word “standard” to retrospective.

Title:
For the Title i would suggest to drop “prospectively ECG-triggered high-pitch CT” since 2 different cardiac CT protocols were applied and instead include the term “phantom study” and the scanner used.

Discussion:
The radiation exposure of up to 30 mSv in the 1st paragraph which was cited from a review paper (Ref. 8) was the result of a multicenter studies focused not only on the coronary CT examination but involved assessment of the CABG and chest pain triple rule out protocol for combined visualization of pulmonary arteries and thoracic aorta. It was not due to substantial oversampling alone but in this case other factors like range of examination, etc. Please rewrite.

4th Paragraph: Why use the term “exclusion” criteria? Patients with a heart rate of < 60 bpm had diagnostic image quality in all coronary segments with prospective ECG-triggered high pitch cardiac CT.

Cite other published studies by Alkadhi H where ways of dose lowering in cardiac CT were ad-dressed.