Reviewer's report

Title: The Radiation Issue in Cardiology: the time for action is now

Version: 1 Date: 16 October 2011

Reviewer: Quirino Ciampi

Reviewer's report:

The aim of this study was to assess the radiation risk for cardiologist defined as the contemporary radiologist. In fact, medical radiation from x-rays and nuclear medicine give a mean effective dose of 3.0 mSv per head per year, equivalent to the radiological risk of 150 chest x-rays. Of the 150 chest x-rays from medical radiation except radiotherapy, almost one half come from cardiology procedures.

The authors underline the necessity to make every effort to reduce unnecessary radiation exposure from medical imaging, that may be best obtained through a systematic implementation of the 3A's strategy: Audit (of true delivered dose); Appropriateness (since at least one-third of examinations are inappropriate); Awareness (since the knowledge of doses and risks is still largely suboptimal in doctors and patients).

The paper is excellent, very interesting and clearly written.

The authors should check the abbreviations: AHA, ACC, ICRP, PCI, MPI, MDCT, IRCP, IAEA, UNSCEAR, LNT

Level of interest: An exceptional article

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests