Reviewer’s report

Title: Edge restenosis: impact of low dose irradiation on cell proliferation and ICAM-1 expression

Version: Date: 16 May 2006

Reviewer: Jakub Wiskirchen

Reviewer’s report:

General
Title Edge Restenosis: Impact of Low Dose Irradiation on Cell Proliferation and ICAM-1 Expression

Abstract Brief, yet informative. However, the section Methods and Results should “at least to my opinion” be separated into two parts. The conclusion can be drawn based upon the data achieved during the presented study.

Keywords No keywords given by the authors. However, keywords like vascular radiation, restenosis, edge effect etc. should be given.

Condensed Abstract Straightforward.


Methods Measurement of Cell Proliferation
The authors state, that the cell numbers were calculated on day 10, 15 and 20 in relation to the controls, however no further information are given about the cell numbers after radiation.

Results see Methods

Discussion Concise. The aspect of ÕY-radiating stents could be concluded as those stents already appear to be a treatment strategy with low dose radiation at the edges resulting in the edge effect (candy wrapper effect). Thus, the conclusion of the authors given in the section “Clinical Implications” “At least partially has been shown in clinical trials.

Rec.: The paper is well written, the lab work is conclusive. The results achieved with the study do explain some observations made when using ÕY-emitting stents in the coronary arteries. Therefore, the paper at least to my mind should be published. Minor revisions like supplying the reader with some keywords or citing e.g. Albiero et al, who performed some studies with ÕY-particle emitting stents, should be done.

----------------------------------------------------------------------------------

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

----------------------------------------------------------------------------------

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

----------------------------------------------------------------------------------

Discretionary Revisions (which the author can choose to ignore)