Reviewer’s report

Title: pO2 Polarography, Contrast Enhanced Color Duplex Sonography (CDS), [18F] Fluoromisonidazole and [18F] Fluorodeoxyglucose Positron Emission Tomography: Validated Methods for the Evaluation of Therapy-Relevant Tumor Oxygenation or only Bricks in the Puzzle of Tumor Hypoxia?

Version: 2 Date: 22 November 2006

Reviewer: Matthias Bruehlmeier

Reviewer’s report:

General

The relationship between FMISO- and FDG PET, tumor perfusion and Eppendorf oxymetry has been researched for at least 15 - 20 years, as far as I know. However, the authors present here an excellent and relatively complete data set, which should be published with no doubt. Earlier similar work often suffered from uncomplete data sets, which is here not the case.

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

Abstract, Results: "...the degree of linear association...": unclear

Results, Correlations: "...Correlations were listed....". Better: "are listed"
A better explanation of how to read Table 1 is needed. I assume that the bold numbers mean that correlation is significant, but this should be explained.

Discussion: Patients are mentioned numberwise, but no such table is presented in the paper.

"...it reflects that tumor hypoxia occurs...": poor English

Conclusions: Poor English of the first sentence. The conclusion should provide a short summary of the work, which is not really the case here.

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests