Reviewer’s report

Title: Lactate transporters and vascular factors in HPV-induced squamous cell carcinoma of the uterine cervix

Version: 2
Date: 6 May 2014
Reviewer: Peter Vaupel

Reviewer’s report:

1. Major compulsory revisions:
In this manuscript the authors state that HIF-1 alpha, GLUT 1 and CA IX are "hypoxia markers" or "intrinsic markers of hypoxia" in cancers of the uterine cervix, although there is clear evidence that all markers mentioned several authors have repeatedly shown that the expression of these markers (proteins) does not correlate with hypoxia in this cancer entity (e.g., Mayer et al., Cancer Res. 2004, Clin. Cancer Res., 2005). This should be mentioned in the Background and Discussion section of this manuscript.

I am not sure whether or not "metabolic markers", a term also used throughout the MS is an adequate description of these proteins. Certainly, they are all "intrinsic markers of tumor progression" as described by Mayer et al. So far, neither HIF-1 alpha nor its target genes can be judged as "pure" hypoxia marker proteins.

It is recommended that the authors may focus on the role of HPV in the upregulation of these proteins (according to the title of the MS).

In the 2nd paragraph of the Background section, the pathogenesis of tumor hypoxia needs some refinement: oxygen diffusion limitations are - inter alia- the consequences of both exacerbated cell proliferation together with inadequate and chaotic angiogenesis (see Bayer et al., Int J Radiat. Oncol. Biol Phys).

2. Minor revisions:
At the end of the IHC evaluation- section: ALG is not a (co-)author of this MS

Level of interest: An article of importance in its field

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

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests