



SDI Review Form 1.6

Journal Name:	International Journal of Biochemistry Research & Review
Manuscript Number:	2013_IJBcRR_8617
Title of the Manuscript:	Mini-review: Respiratory and pH imbalance at the early precancerous stage
Type of the Article	Mini-review

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



SDI Review Form 1.6

PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments	The authors should to systematize the use of the acronym RpHI, sometimes they use the acronym other times they write respiratory and pH imbalance. Abstract The first sentence is difficult to understand, please rephrase this sentence. <u>Keywords</u> What is the reason to use the term precancerous stage instead of preneoplastic? In my opinion the authors should to use cancer development as a keyword <u>Introduction</u> The authors should to explain better the cancer etiology. Cancer etiology is not only based in environmental factors. Line 59, page 2; the authors 20-22, cited Warburg. Please make the proper citation. Line 76, page 3; What means first malign cell? According to the knowledge of cancer development, after the exposition to a carcinogen (chemical, physical, viruses, parasites, etc...) first appear preneoplastic cells and latter these cells develop to neoplastic cells. However, according to the manuscript authors RpHI induce cell divisions producing benign and malignat tumors (lines 66 to 69). Can the authors explain better this idea? Page 6, figure 1. In opinion the legend of the figure is not adequate. The figure intended to explain the relation between the degree/level of RpHI and local	



SDI Review Form 1.6

	stress with cancer development. In cancer development, independently of the cancer etiology, appear first preneoplastic cells. Why put the authors in the figure benign tumors? The figure 1 is also difficult to understand. What means Cancer, Cancer I and Cancer II? Line 166, page 6. The authors said: "A stronger action of the stress agents could kill the body at this stage", please clarify this idea. Page 7, It is difficult to understand what is Cancer I and Cancer II? Page 8, topic <u>Chemical carcinogenicity...of carcinogen</u> Line 242 The authors generalize that all body cells have the same capacity to biotransform/metabolize chemical carcinogens. This is not correct. Please perform the adequate corrections. The authors should to explain in particular the chemical carcinogens biotransformation and its influence in RpHI. The authors should read and cite a chemical carcinogenesis paper. Page 10, line 278, "...from an early dysplastic lesion to full-blown metastatic malignancy seems to be associated with increases in genomic instability." In my opinion, this idea is not entirely correct. I will write: from preneoplastic lesions to cancer seems to be associated gradually increases in genomic instability. The authors said in the same page, line 283-284 that the interference of hypermethylation and hypomethylation in cancer cells is unclear, based in a reference from 1994. I recommend reading the following paper and make the appropriate corrections: <u>Characterizing DNA methylation alterations from The</u>	
--	--	--



SDI Review Form 1.6

	<u>Cancer Genome Atlas.</u> Weisenberger DJ. J Clin Invest. 2014 Jan 2;124(1):17-23. doi: 10.1172/JCI69740. Epub 2014 Jan 2. Page 11 removes the acronym ER, line 299. The phrase: "The molecular details of this connection are still being elaborated". Lines 328-329 in page 12. Contradicts the phrase 436-437 in page 15: Tissue hypoxia is a well-known stimulus to angiogenesis" Please clarify this idea. Page 16, lines 468 and 469. Enumerate cancers that are beneficially affected by physical activity and cancer that are associated with overweight and obesity. Page 16 lines 473 and 475, please clarify the interference of anxiety and depression in cancer survive. Concluding remarks, last sentence, lines 519 and 520; according to the author's oxygen tension, hypoxia and carbon dioxide are parameters that may influence cancer development. Is this influence positive or negative? <u>References</u> In references number 11, 18, 32, 33, 34, 35, 36, 37, 57; 74 and 98 lack pages. In reference 74, please put 335(6064):29. doi: 10.1126/science.335.6064.29. In reference 100, please remove the DOI number and put the volume number and pages	
--	---	--



SDI Review Form 1.6

<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments	In this manuscript the authors review the interference of respiratory and pH imbalance in cancer development. Despite being an interested and novel theme, to be accepted for publication the authors should to clarify several aspects. I identify a lack of strength. The manuscript title is not appropriate to this mini-review. In my opinion: "The influence of respiratory and pH imbalance in cancer development" is more suitable. I recommend the manuscript revision by an English native. The references should be actualized; some bibliographic references are old and not appropriated to a mini-review.	

Reviewer Details:

Name:	Paula A. Oliveira
Department, University & Country	Department of Veterinary Sciences, University of Trás-os-Montes and Alto Douro, Portugal