

# Review of: "The role of pH in cancer biology and its impact on cellular repair, tumor markers, tumor stages, isoenzymes, and therapeutics"

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The manuscript by Aki and Ahmed entitled "The role of pH in cancer biology and its impact on cellular repair, tumor markers, tumor stages, isoenzymes, and therapeutics" is a short review dealing with different aspects of pH dysregulation in cancer cells. Overall, the manuscript is well organized, sufficiently clear, and contains appropriate figures that are of help to the Reader. Nevertheless, I would like to suggest to the Authors a few amendments which, in my opinion, would significantly improve the quality of the manuscript:

1. Page 2, paragraph 2: "...as histones, which are alkaline...". Please consider that the pI of histones is rather high (about 11); accordingly, I would not propose (as the Authors mention here) that there is a significant dependence on pH of the functional properties of histones.
2. I suggest to use the term "duplication" when a statement refers to cells doublings (e.g. in line 8 of paragraph 2), and to exclusively use the term "replication" concerning the process of DNA replication.
3. Page 2, line 7: "Inducers of cancer...". To me this sentence sounds a bit ambiguous. Please amend.
4. In a review dealing with the link between pH and cancer, I would discuss a bit more in detail the importance of lactate and of lactate dehydrogenases in generating an acidic extracellular pH.
5. In my opinion, it would be worthwhile to explain more clearly what the Authors mean when they refer to glucosodiene as "a glucose derivative with alkaline properties".

Minor points:

- a. Page 2, first line of the Introduction: "Cancer a multifaceted...". Something was deleted here? Please check this sentence.