

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

Ana Sayuri Yamagata<sup>1</sup>

1 Universidade de São Paulo

Potential competing interests: No potential competing interests to declare.

The content is very disorganized.

This sentence is not clear for me: "Tumor development stages exhibit distinct pH dynamics, with acidic extracellular destruction and alkaline intracellular replication."

The text is too broad from the beginning to the end. It should become more specific along the text. Vague expressions like "cancer inducers" and "pH regulators" were used without mentioning examples. Please explain better these terms.

"disruption of cellular hydrogen ion concentration" does not make sense. The concentration of ions is not something you can separate.

The whole paragraph before figure 1 does not have a single reference.

Why is it discussing about infection, autoimmunity and allergy, if this review should be about cancer?

This part should be more explored than just this short affirmation. "In the context of cancer, the altered pH environment could lead to changes in the expression and activity of specific isoenzymes. This alteration could result in the production of different products, including tumor markers, which can be utilized for diagnostic purposes."

The part of clinical studies and treatments should be more explored to be mentioned in the conclusion.