

# Review of: "[Perspective] Glucolipotoxicity: A Novel Different Perspective on the Causes of Cancer"

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**Potential competing interests:** No potential competing interests to declare.

Authors have focused their work on the involvement of glucolipotoxicity in cancer. They suggest that the accumulation of glycolipids into cells is involved in tumor development.

The hypothesis is interesting but authors must greatly improve the article:

1. Focus the Abstract on the glucolipotoxicity hypothesis which is the aim of the article.
2. A Table clearly showing the experimental data supporting the glucolipotoxicity hypothesis must be added. References supporting this hypothesis must be also added. This hypothesis must be clearly established based on experimental data.
3. Authors must indicate the future research that must be performed to confirm the glucolipotoxicity hypothesis as well as the possible antitumor therapeutic strategies that could be developed based on this hypothesis.
4. The text must be accompanied with figures; thus, figures showing the mechanisms involved must be added. This will serve to the reader to better understand the Warburg effect and the glucolipotoxicity hypothesis and their relationships.
5. The relationship between glucolipotoxicity and tumor growth (activation of the oncogenic pathways) must be clearly supported with experimental data and references.
6. Some parts of the text are repetitive. This must be avoided.
7. Section 5. Glucolipotoxicity: unraveling... In this section only a reference appears (it is an abstract: preliminary data), not a published article. References are missing along the text, here and in other parts of the manuscript (e.g., section 7 (Discussion)).
8. An in-depth Discussion must be done, mainly focused on the involvement of the glucolipotoxicity hypothesis in cancer development. Moreover, the limitations of this hypothesis must also be indicated.
9. Conclusion must be improved. The aim of the authors is focused on the glucolipotoxicity hypothesis; however, more convincing experimental data must be shown. Focus the Conclusion section on the hypothesis suggested by the authors
10. Check list of references. They appear in different ways cited.
11. In sum, the text must be largely restructured, the glucolipotoxicity hypothesis must be supported with experimental data and references and Figures and Tables clearly explaining this hypothesis and the Warburg effect must be added. To be convincing, authors must explain in more detail, clarity and in a more didactic way the hypothesis they defend.

