Review of: "Somatic evolution of Cancer: A new synthesis"

Afsareen Bano[1]

1 Maharshi Dayanand University

Potential competing interests: No potential competing interests to declare.

Baig et al. offers a novel perspective through this excellent article on cancer evolution and its prevention. Present manuscript signifies the importance of general physiological pathways/functions which are repurposed in the course of cancer. The gist of the article is that tumors are induced by overreaction of cells caused by low levels of EGF and other growth factors. The pioneering and avant-garde perspective of authors on cancer, will surely going to encourage worldwide researchers to think in a different way about cancer origin and prevention, which can provide new insights and impending treatment approaches.

I have meticulously gone through this paper with great curiosity and found some interesting areas to focus on research. Alongside I found some lacunae, which are as follows:

- Role of genetic inconsistency and its involvement to cancer development was missing in the manuscript.
- Although the authors have emphasized on the preclusion of cancerous mutations in the germline but doesn't discussed somatic mutations that leads to malignancies, appropriately.
- As cancer is a complex entity involving various factors contributing to it starting from its initiation and leading to metastatic stages, it can’t be explained merely on the basis of few immunological components.
- The details of the association between serum growth factor levels and signaling pathways in tumorigenesis are not elucidated.
- Congenital malignancies can’t be addressed by lifestyle variations.
- External factors, such as harmful radiations and certain chemical agents, present in environment, retain the potential of cell damage and might induce tumor formation.
- Manuscript fails to translate the proposed cancer research into clinical applications and novel treatment approach in near future.
- Lifestyle of an individual indeed provides relevant information but didn’t cause tumorigenic mutations exclusively.

In summary, this interesting paper presents an intriguing and innovative theory that challenges traditional views of cancer biology and prevention. I believe that theory presented in the article more convincing, the authors may need to give a clearer explanation of the above issues. So it is recommended that this manuscript deserves to be published in Qeios after minor corrections as suggested above.