

Peer Review

Review of: "The Development of Differentiation-Based Therapy for Breast Cancer Using EDAR and XEDAR Signalling Pathways: A Conceptual Framework"

Favour Ebimobere Odubo¹

1. Chemistry and Biochemistry, Baylor University, United States

This manuscript by Sławomir Wiśniewski describes the challenges of treating breast cancer and introduces a novel approach involving the Ectodysplasin A receptor (EDAR) and X-linked Ectodysplasin-A2 receptor (XEDAR) signaling pathways. The manuscript is well-written and is significant as it outlines a two-phase therapeutic strategy that seeks to restore XEDAR expression through epigenetic methods and utilize synthetic ligands to activate these pathways. Thus, I recommend the publication of this manuscript after some corrections have been made:

- Defining the full acronym of NF- κ B in the introduction would enhance the reader's understanding of the background image.
- When referring to a manageable condition, could the writer elaborate more on that, and have any clinical studies been conducted towards that claim?
- The phrase 'focusing on restoring differentiation rather than solely on cytotoxicity' is repeated multiple times, appearing on pages 1, 3, and 5.
- On page 6, no reference was inputted for the findings on XEDAR silencing through promoter methylation. Additionally, no references were provided for previous studies on the proposed Phase 1 and Phase 2.
- Can this differentiation therapy be applied to stage 1 breast cancer, and are there potential possibilities to be applied to other types of cancer?
- What makes this approach less toxic compared to other approaches of treating cancer?

- Words like 'Finally' and 'In conclusion' were used frequently, making it seem like the write-up was ending multiple times. Adjusting these transitions would improve clarity.
- Are there methods to monitor NF- κ B activation during the differentiation therapy?

Declarations

Potential competing interests: No potential competing interests to declare.