

Peer Review

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

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New Peer Review

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



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Declarations

How would you rate the work overall?

Reviewer Comments:

- Can you provide specific examples of targeted delivery systems for mitigating off-target effects?

- What specific data or studies can support the claim of reduced resistance and tumor heterogeneity?

1. Technical Challenges

- Address ligand design, stability, bioavailability, and immunogenicity risks.
- Mitigate off-target effects of epigenetic modulators using targeted delivery systems like nanoparticles.

2. Biomarkers

- Highlight XEDAR expression, promoter methylation, and NF- κ B activity as key biomarkers.
- Recommend advanced monitoring tools like ctDNA analysis and NGS for dynamic therapy tracking.

3. Therapy Integration

- Show synergy with chemotherapy (TNBC), hormone therapy (ER+/PR+), and HER2+ targeted therapy.
- Provide data on reduced resistance and tumor heterogeneity.

4. Timing and Sequencing

- Justify pre-phase demethylation followed by XEDAR activation.
- Use biomarkers for therapy synchronization and personalization.

5. Toxicity Reduction

- Demonstrate lower toxicity compared to chemotherapy, benefiting older or comorbid patients.

6. Future Research

- Validate efficacy, optimize protocols, and explore pathway crosstalk using computational modeling.

Attachments: available at <https://doi.org/10.32388/JL9VP5>

Declarations

Potential competing interests: No potential competing interests to declare.