

Review of: "Design, Synthesis, and In-Silico Analysis of Thiazole-Embedded Schiff Base Derivatives for Breast Cancer Therapeutic Potential"

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Potential competing interests: No potential competing interests to declare.

This study explores the synthesis, characterization, and in-silico analysis of ten thiazole-based Schiff base derivatives (TZ1-10) for potential anticancer activity, benchmarking them against FDA-approved breast cancer drugs. The work presents new thiazole-based Schiff base derivatives and compares them to existing therapies. Compounds TZ6 and TZ8 stood out with high docking scores (-8.0 and -8.2 kcal/mol) against fatty acid synthase (PDB ID: 4FX3) and favorable ADME profiles, demonstrating strong binding affinity and low toxicity.

Suggestions for Improvement:

While computational predictions are valuable, emphasizing the need for experimental validation (in-vitro and in-vivo studies) earlier in the literature would strengthen the discussion. Provide more details on geometrically optimized structural images. The manuscript has a limited number of references; more should be added across all sections. Additionally, figures and tables are not discussed or cited within the manuscript. These improvements will enhance the clarity and impact of the manuscript, aligning it more closely with high-quality research standards.