

# Review of: "Synthesis of 1, 2-Disubstituted Benzimidazoles at Ambient Temperature Catalyzed by 1-Methylimidazolium Tetrafluoroborate ([Hmim] BF<sub>4</sub>) and Investigating Their Anti-ovarian Cancer Properties Through Molecular Docking Studies and Calculations"

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Potential competing interests: No potential competing interests to declare.

This paper presents good findings, yet there are several parts of the manuscript that require correction.

1. The abstract should be re-written. For example,

“All the synthesized compounds bind to an agonist at the active site of the 6LAD protein, which leads to the inactivation of this protein and produces beneficial effects during ovarian cancer treatment” is not clear.

1. Introduction: The introduction lacks homogeneity and needs to be rewritten with correlation in each paragraph.

2. Experimental section: A detailed procedure for synthesis and molecular docking studies should be given.

3. Results and Discussion:

- There are typing mistakes, for example, Lee Pinsky's, instead of the Lipinski rule of five, and it is not the rule of medication; instead, it should be corrected as the rule of five for drug likeliness.
- According to the Lipinski rule of five, hydrogen acceptor groups, the number of O and N should not be more than 10 and not more than 5.
- **Table 3, 4, and 5, where the** results of molecular docking calculations of synthesized compounds are mentioned for (**4a-4l**), in each heading; however, the entries are 3a-l.
- Only molecular docking studies cannot confirm the anti-cancer activities, which should be confirmed using biological investigation.
- Overall, the manuscript has good findings; however, without biological studies, the study is incomplete.